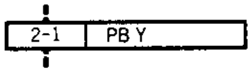
SECTION 4
DIAGRAMS AND CIRCUIT BOARDS

■ FOREWORD

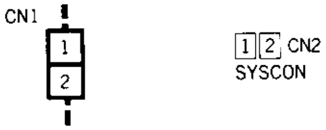
1. Expression of connector

Connector is expressed in two ways.

1) The following illustrates 'CN2 pin 1' for example.



2) The following illustrates 'CN1 pins 1 and 2'.



2. Expression of wiring

As the following circuit diagram is divided to print on some sheets, such an indication as the following is found in the case the wiring extends over two or more divided sections.

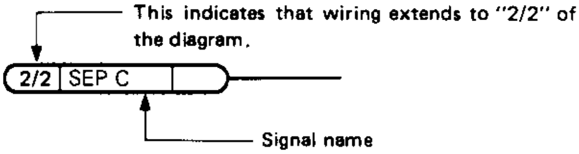
1) Circuit diagram divided into two or more sections:

Board No.	Board Name	Number of divided sections
10	VIDEO-1	2 (1/2~2/2)
11	VIDEO-2	2 (1/2~2/2)
12	AV PRE/REC	2 (1/2~2/2)
20	FM AUDIO	3 (1/3~3/3)
21	NORMAL AUDIO (BR-S800)	4 (1/4~4/4)
23	AV I/O	2 (1/2~2/2)
30	M-CTL/SERVO	2 (1/2~2/2)
—	OVERALL	2 (1/2~2/2)

2) Indication of wiring which extends to another section:

(Example)

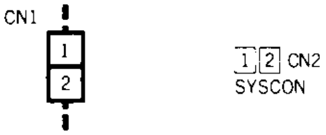
On the "1/2" diagram of VIDEO-1 board, such an indication as the following is found on the "SEP C" signal line.



In the above case, the end of the wiring is connected to the "SEP C" on the 2nd section of the diagram.

3. Wiring of connector

(Example)



In the above example, CN1 is connected with CN2 on 1 2 SYSCON board.

4. Signal flow on the diagram

The following arrow marks indicate the specified signal paths respectively.

➡ : RECORDING or EE signal path

⇨ : PLAYBACK signal path

➩ : REC/PLAY signal path

5. Measurement of voltage and waveform

1) Voltage

Measured by digital voltmeter in REC or PB mode.

2) Waveform

REC: Waveforms in REC mode are those of the color bars signal that was input through the LINE IN terminal and observed with an oscilloscope. (Unless otherwise specified, the color bars signal was recorded in S-VHS mode.)

PB: Waveforms in PB mode are those of the MHV-2H (for S-VHS mode) alignment tape that was played back in the S-VHS mode and observed with an oscilloscope.

6. Unit of value

Unless otherwise specified:

1) Resistance is in Ω (1/6 W)
2) Capacitance in μF
3) Inductance in μH
4) Screened parts (in ▨) are important for safety assurance. When replacing them, use specified parts.
5) All P.C. board diagrams show the soldered side (except drawings specified otherwise).

7. Others

1) Items whose headings are followed by a model number of BR-S800 or BR-S500 are applicable to only the specified model (BR-S800U or BR-S500U).
2) Certain symbols or constants of parts appearing in the common circuit diagrams of the BR-S800U and BR-S500U are marked with S800 or S500, which indicates that those parts or constants are limitedly used in the BR-S800U or BR-S500U.

For detail of electrical parts, refer to the Section 6 Electrical Parts List.

4.1 REPLACING SUBMINATURE "CHIP" PARTS

1. General description

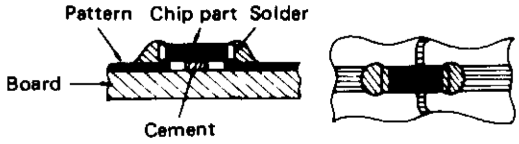
Some of resistors, variable resistors, shorting jumpers (0 Ω resistors), ceramic capacitors, transistors, diodes are chip parts. Those removed once cannot be used again.

2. Replacement of chip parts

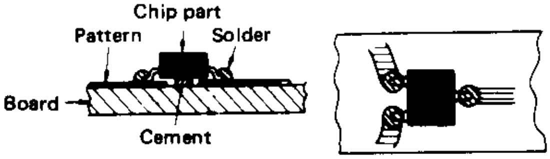
Replacement of chip parts should be performed as follows. Use a soldering iron (17 W for 260–30°C approx.) that has sharp-pointed tip and high performance in insulation.
It is more convenient to use a soldering iron with solder absorber (55 W approx.).

(1) Soldered condition of chip parts

- Resistors, capacitors, etc.



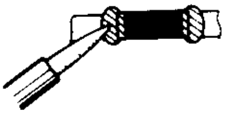
- Transistors, diodes, etc.



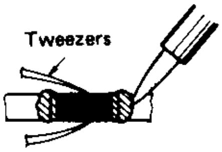
(2) Removing of chip parts

- Resistors, capacitors, etc.

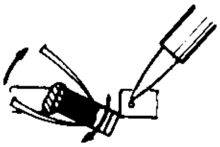
i) Melt solder at a side.



ii) Holding the chip with tweezers, melt solder at the other side.

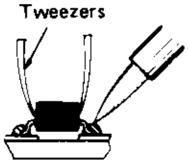


iii) Take off the chip in twisting and sliding motion.

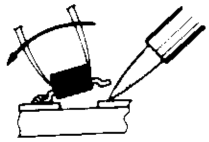


- Transistors, diodes, etc.

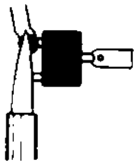
i) Melt solder at the side of single lead.



ii) Lift the unsolderd side upwards.



iii) Simultaneously melt solder at two leads of the other side and pull up the chip.

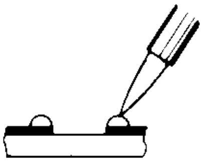


(3) Preheating and soldering of chip parts

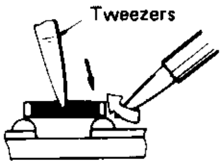
Except transistors, make sure to preheat all chip parts, capacitors in particular, with a hot wind of 150°C approx. (of a hair dryer, etc.) for 2 minutes just before soldering, and immediately solder by a soldering iron of approx. 30 W.

(4) Attaching of chip parts

i) Heap up a proper amount of solder beforehand.



ii) Holding down a new chip by tweezers, solder it to the board by a soldering iron to melt solder from its lower part to the upper part (in the direction shown by a big arrow).



Note:
- Don't heat chip parts over 3 seconds.
- Don't rub electrodes.
- Don't use chip parts which were once removed.
- No cement is required.

3. Shapes of transistors & diodes

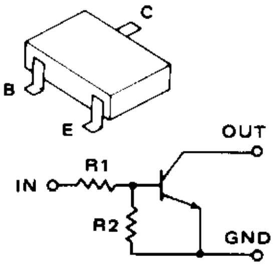
- **Transistors**

DTA124EK	2
DTA144EK	2
DTC114EK	1
DTC114YK	1
DTC144EK	1
DTC144EU	1
FMG2	3
FMS1	4
FMW1	5
IMX1	6
IMZ1	7
IMZ2	8
2SA1022C	9
2SB709	9
2SC2412K	9
2SC2778	9
2SC4081	9
2SD601/A	9
2SD602/A	9
2SK621	10

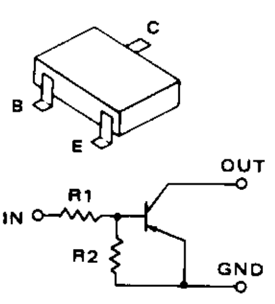
- **Diodes**

DAN202K	11
DAP202K	12
MA28WA	13
MA3056	13
MA3075	13

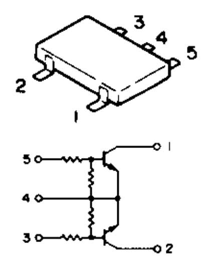
1


C
B
E
OUT
R1
IN
R2
GND

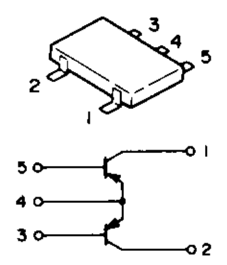
2


C
B
E
OUT
R1
IN
R2
GND

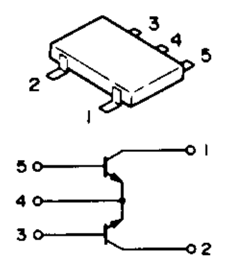
3


3
4
5
2
1
5
1
4
3
2

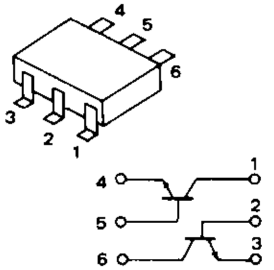
4


3
4
5
2
1
5
1
4
3
2

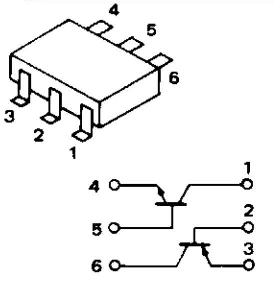
5


3
4
5
2
1
5
1
4
3
2

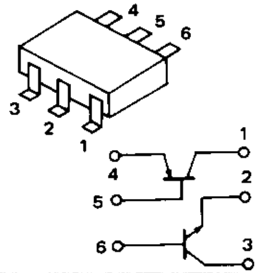
6


4
5
6
3
2
1
1
4
2
5
3
6

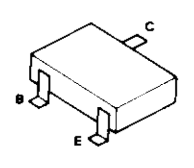
7


4
5
6
3
2
1
1
4
2
5
3
6

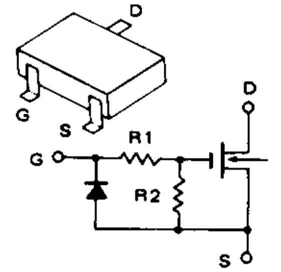
8


4
5
6
3
2
1
1
4
2
5
6
3

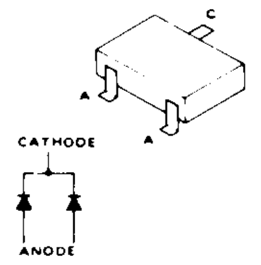
9



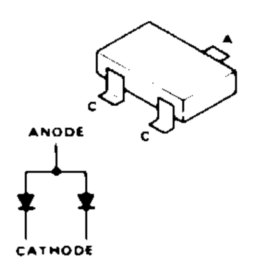
10


D
G
S
D
R1
G
R2
S

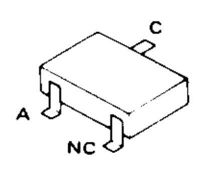
11


C
A
A
CATHODE
ANODE

12


A
C
C
ANODE
CATHODE

13



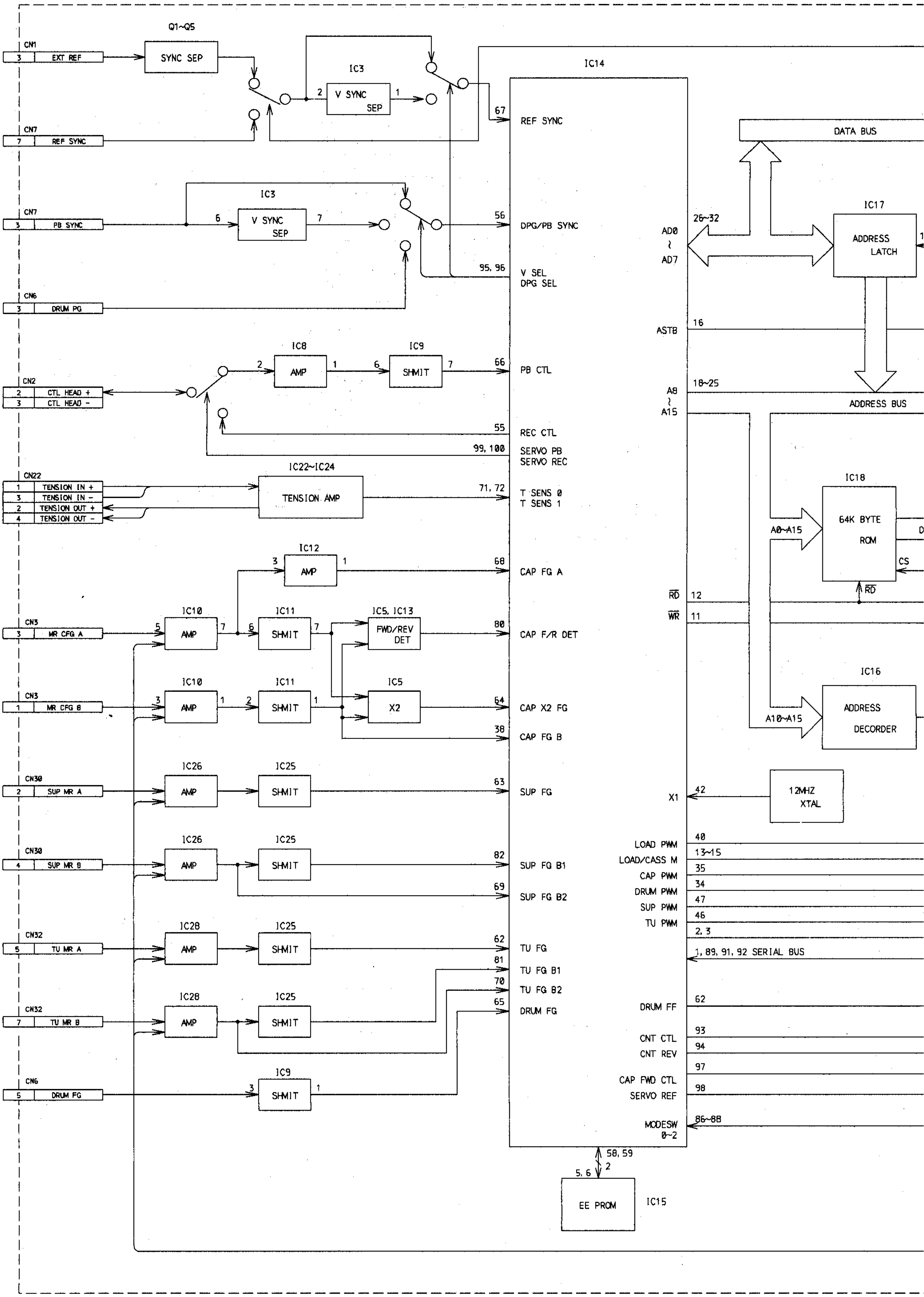
4.2 INDEX TO PAGES OF MAIN BOARDS

Board No.	Board Name	Page of diagram			
		Block diagram	Schematic diagram	Circuit board	Parts list
01	MOTHER-1	—	4-16	4-18	6-2
02	MOTHER-2	—	4-17	4-19	6-2
03	SLOT MOTHER	—	4-20	4-21	6-2
10	VIDEO-1	4-6, 8, 9	4-22, 23	4-24, 27	6-2~9
11	VIDEO-2 (STILL SWITCH INC.)	4-7, 8, 9	4-28, 29	4-30, 33	6-9~16
12	AV PRE/REC	4-8, 9, 10, 12	4-34, 35	4-34	6-17, 18
20	FM AUDIO	4-10, 12	4-45~47	4-48	6-19~21
21	NORMAL AUDIO (BR-S800)	4-11	4-36~39	4-40	6-22~26
22	NORMAL AUDIO (BR-S500)	4-13	4-43	4-44	6-27~28
23	AV I/O	4-10	4-50, 51	4-52	6-29~31
30	SERVO/M-CTL	4-5	4-58, 59	4-54, 57	6-32~37
31	SYSCON	4-14, 15	4-60	4-61	6-38, 39
32	OPERATION-CPU	4-10, 12, 15	4-62	4-64	6-40
33	OPERATION-VR	4-15	4-63	4-64	6-40, 41
34	OPERATION-SW	4-15	4-62	4-64	6-42, 43
35	OPERATION-DIAL	4-15	4-62	4-64	6-44
40	REAR	4-8	4-65	4-66	6-44
50	END SENSOR	—	4-21	4-21	6-45
51	REC SAFE SW	—	—	4-21	6-45
52	S-SWITCH	—	—	4-21	6-46
53	MODE MOTOR	—	—	4-21	6-46
54	C. HOUSING	—	—	4-21	6-47
55	MECHA TERMINAL	—	—	4-21	6-47
56	A/C HEAD	—	—	4-21	6-48
60	PRIMARY	—	4-67	4-68	6-48
61	SW REGULATOR	—	4-67	4-68	6-49, 50
62	REGULATOR	—	4-67	4-68	6-59, 51
64	LINE FILTER	—	4-67	4-68	6-51
94	DRUM	—	—	4-34	—
95	CONNECTOR	—	—	—	6-52

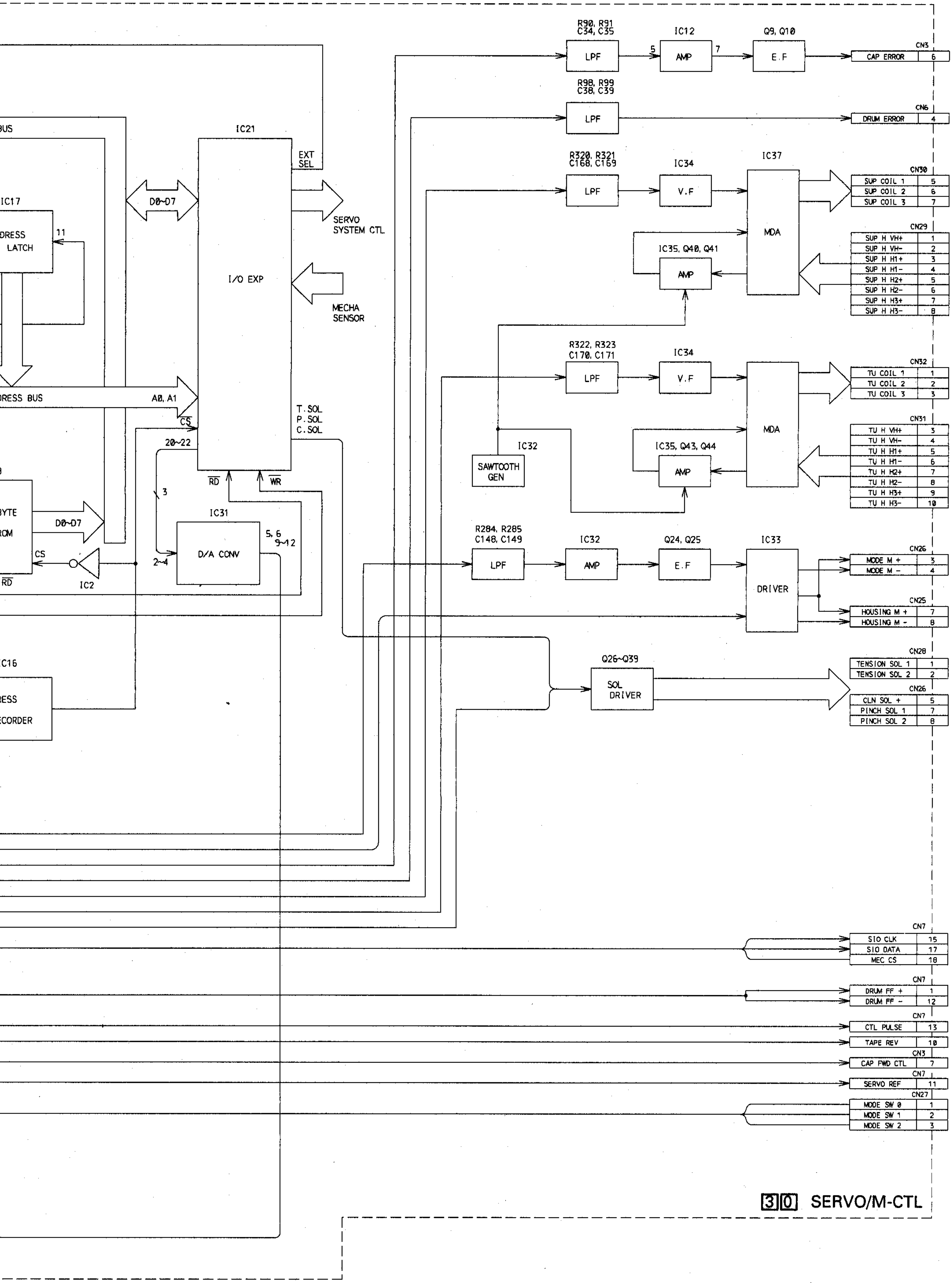
ERRATA

Location	Page	Ref. No. (Adress)	WRONG	CORRECT	Description
10 VIDEO-1	4-23	R166 (5C)	1H LEV ADJ	1H PHASE ADJ	—
		R259 (5C)	1H PHASE ADJ	1H LEVEL ADJ	—
11 VIDEO-2		R147 (2G)	1K	1K : BR-S800 820 : BR-S500	—
20 FM AUDIO	4-45	L2 (4D)	100	1	—
		L1 (1D)	100	1	—
23 AV I/O	4-51	X2 (2F)	X2	X1 (14.318 MHz)	—
30 M-CTL/SERVO	4-59	L33 (2D)	35.7	37	—
61 SW. REGULATOR	4-67	P1 (5C)	P1	T1	—

4.3 SERVO/MECHA-CONTROLL BLOCK DIAGRAM

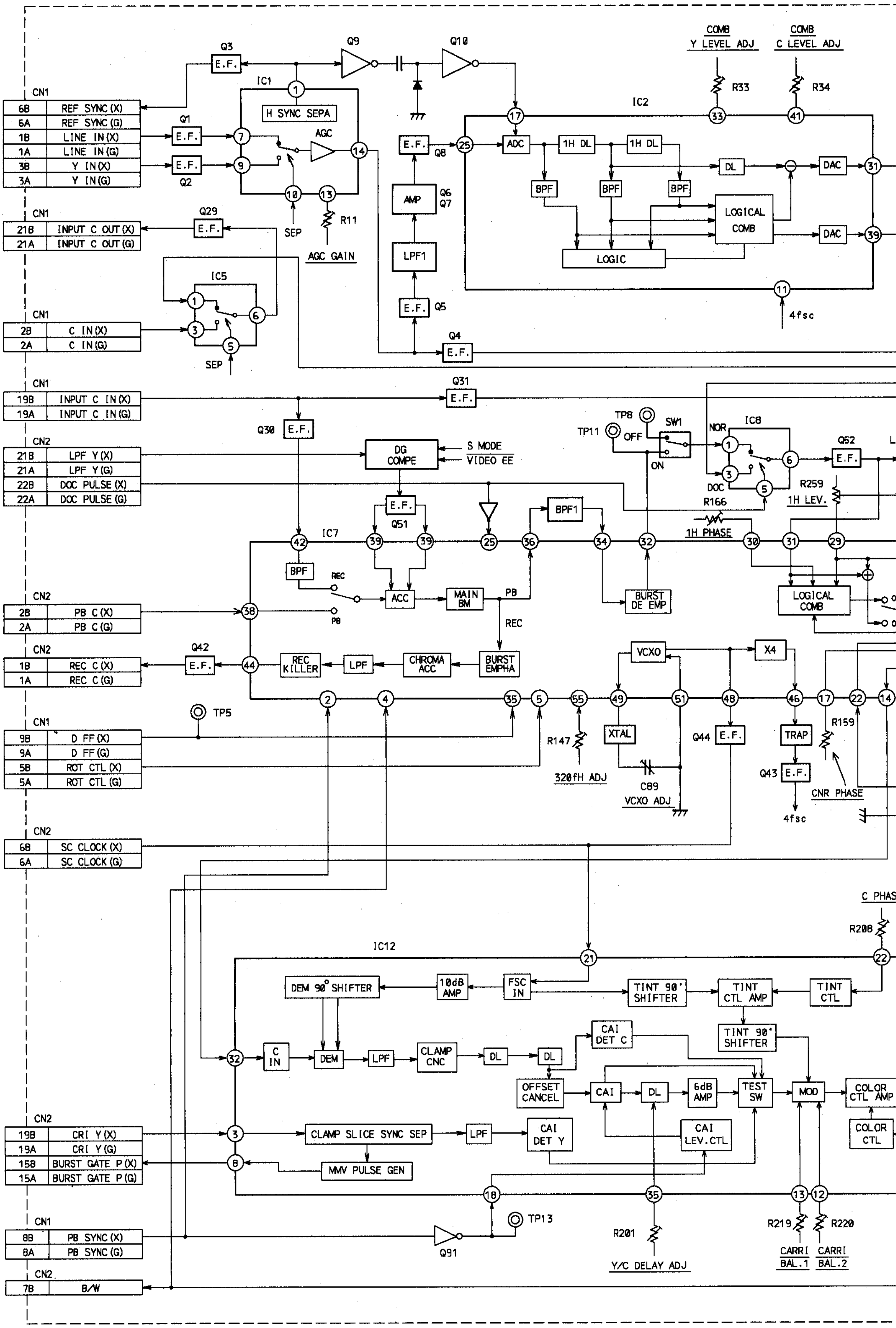


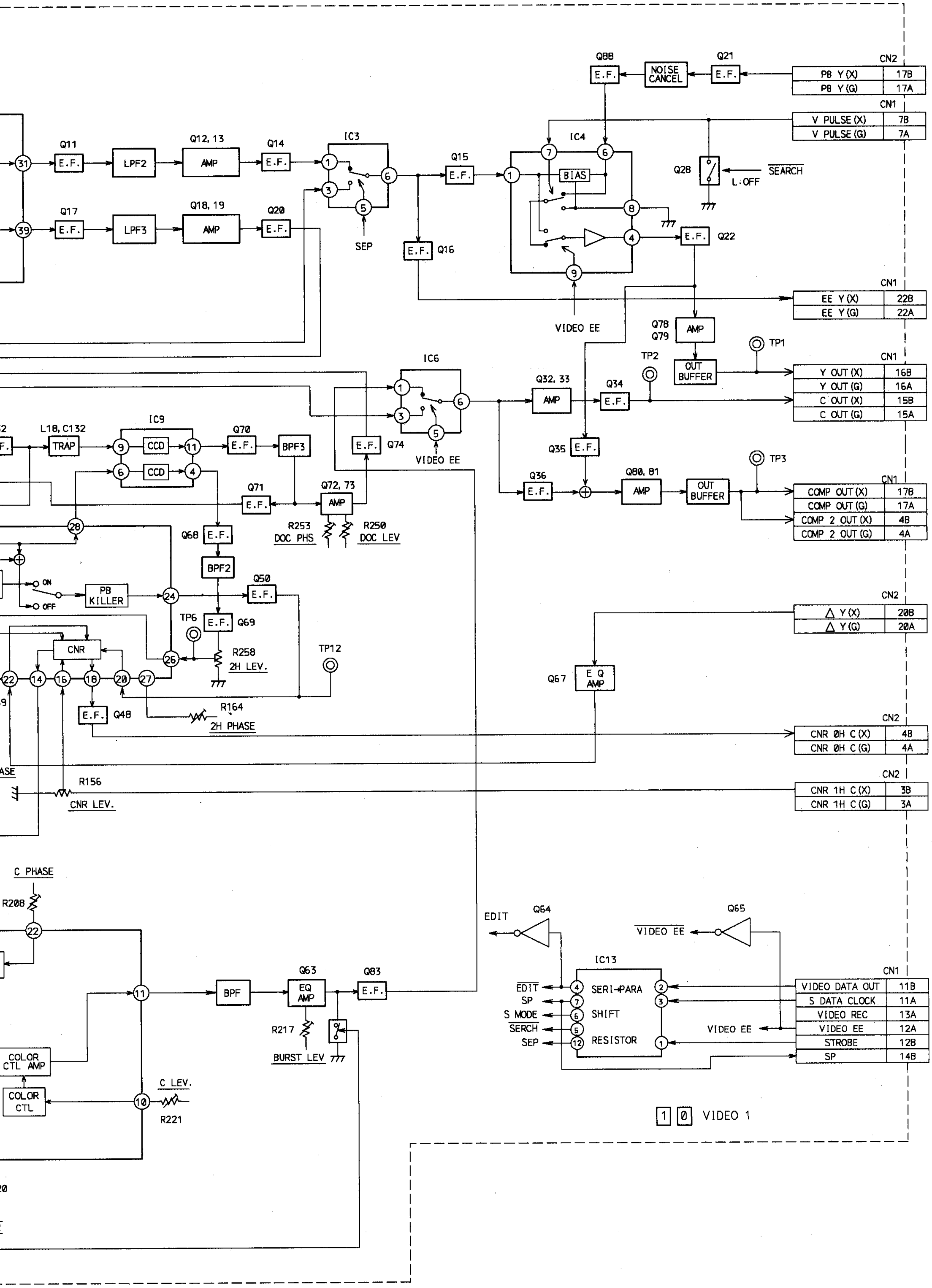
CN1
3 EXT REF
Q1~Q5
SYNC SEP
IC3
2 V SYNC SEP 1
CN7
7 REF SYNC
IC14
67 REF SYNC
DATA BUS
CN7
3 PB SYNC
IC3
6 V SYNC SEP 7
56 DPG/PB SYNC
95, 96 V SEL DPG SEL
AD0 ~ AD7
26~32
IC17
ADDRESS LATCH
CN6
3 DRUM PG
ASTB 16
IC8 AMP
IC9 SHMIT
CN2
2 CTL HEAD +
3 CTL HEAD -
66 PB CTL
A8 ~ A15 18~25
ADDRESS BUS
55 REC CTL
99, 100 SERVO PB SERVO REC
CN22
1 TENSION IN +
3 TENSION IN -
2 TENSION OUT +
4 TENSION OUT -
IC22~IC24
TENSION AMP
71, 72 T SENS 0 T SENS 1
IC18
64K BYTE ROM
A0~A15
CS
RD
IC12 AMP
68 CAP FG A
RD 12
WR 11
CN3
3 MR CFG A
IC10 AMP
IC11 SHMIT
IC5, IC13
FWD/REV DET
80 CAP F/R DET
CN3
1 MR CFG B
IC10 AMP
IC11 SHMIT
IC5 X2
64 CAP X2 FG
38 CAP FG B
IC16
ADDRESS DECORDER
A10~A15
CN30
2 SUP MR A
IC26 AMP
IC25 SHMIT
63 SUP FG
X1 42
12MHZ XTAL
CN30
4 SUP MR B
IC26 AMP
IC25 SHMIT
82 SUP FG B1
69 SUP FG B2
LOAD PWM 40
LOAD/CASS M 13~15
CAP PWM 35
DRUM PWM 34
SUP PWM 47
TU PWM 46
2, 3
1, 89, 91, 92 SERIAL BUS
CN32
5 TU MR A
IC28 AMP
IC25 SHMIT
62 TU FG
81 TU FG B1
70 TU FG B2
65 DRUM FG
CN32
7 TU MR B
IC28 AMP
IC25 SHMIT
DRUM FF 62
CNT CTL 93
CNT REV 94
97
CAP FWD CTL 98
SERVO REF
CN6
5 DRUM FG
IC9 3 SHMIT 1
MODESW 0~2 86~88
58, 59
2
5, 6
EE PROM
IC15


R90, R91
C34, C35
LPF
5
IC12
AMP
7
Q9, Q10
E.F
CN3
CAP ERROR 6
R98, R99
C38, C39
LPF
CN6
DRUM ERROR 4
BUS
IC21
EXT SEL
D0~D7
I/O EXP
SERVO SYSTEM CTL
MECHA SENSOR
IC17
DRESS LATCH
11
R320, R321
C168, C169
LPF
IC34
V.F
IC37
MDA
CN30
SUP COIL 1 5
SUP COIL 2 6
SUP COIL 3 7
IC35, Q40, Q41
AMP
CN29
SUP H VH+ 1
SUP H VH- 2
SUP H H1+ 3
SUP H H1- 4
SUP H H2+ 5
SUP H H2- 6
SUP H H3+ 7
SUP H H3- 8
DRESS BUS
A0, A1
CS
20~22
T.SOL
P.SOL
C.SOL
R322, R323
C170, C171
LPF
IC34
V.F
MDA
CN32
TU COIL 1 1
TU COIL 2 2
TU COIL 3 3
IC32
SAWTOOTH GEN
IC35, Q43, Q44
AMP
CN31
TU H VH+ 3
TU H VH- 4
TU H H1+ 5
TU H H1- 6
TU H H2+ 7
TU H H2- 8
TU H H3+ 9
TU H H3- 10
RD
WR
3
BYTE
ROM
D0~D7
IC31
D/A CONV
2~4
5, 6
9~12
CS
IC2
RD
R284, R285
C148, C149
LPF
IC32
AMP
Q24, Q25
E.F
IC33
DRIVER
CN26
MODE M + 3
MODE M - 4
CN25
HOUSING M + 7
HOUSING M - 8
IC16
RESS
ECORDER
Q26~Q39
SOL DRIVER
CN28
TENSION SOL 1 1
TENSION SOL 2 2
CN26
CLN SOL + 5
PINCH SOL 1 7
PINCH SOL 2 8
CN7
SIO CLK 15
SIO DATA 17
MEC CS 18
CN7
DRUM FF + 1
DRUM FF - 12
CN7
CTL PULSE 13
TAPE REV 10
CN3
CAP FWD CTL 7
CN7
SERVO REF 11
CN27
MODE SW 0 1
MODE SW 1 2
MODE SW 2 3

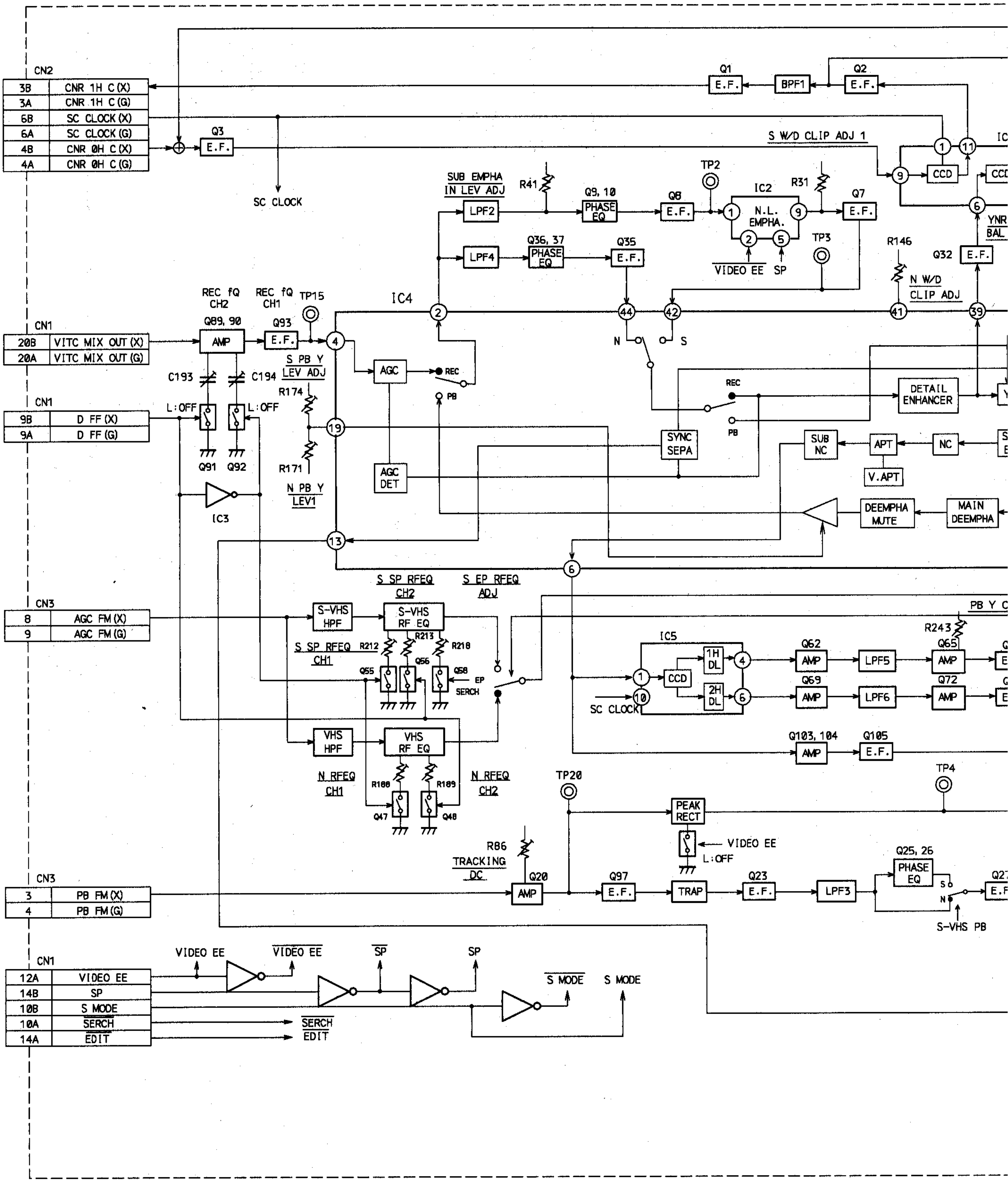
30 SERVO/M-CTL

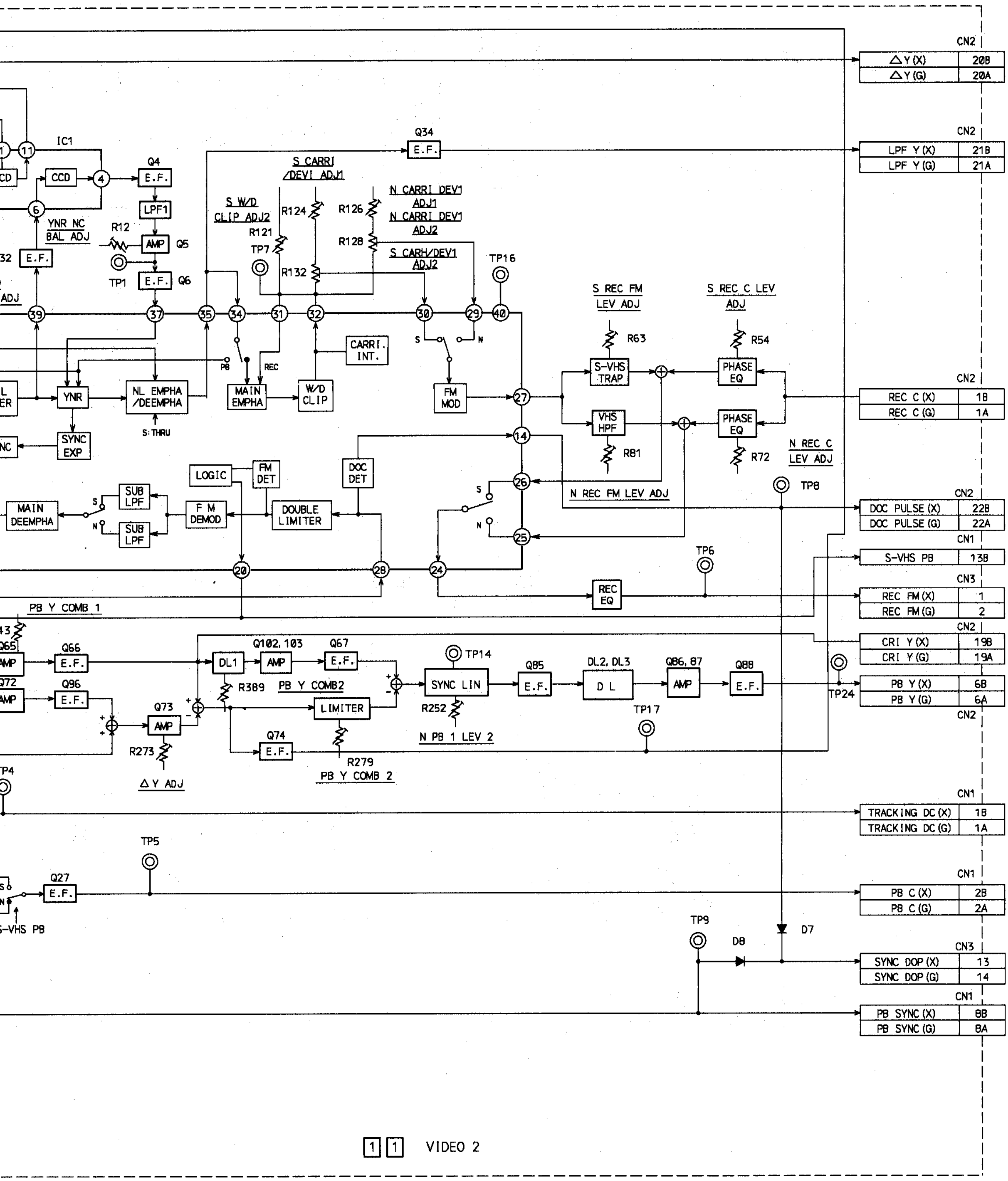
4.4 VIDEO-1 BLOCK DIAGRAM


CN1
6B REF SYNC (X)
6A REF SYNC (G)
1B LINE IN (X)
1A LINE IN (G)
3B Y IN (X)
3A Y IN (G)
Q3 E.F.
Q9
Q10
Q1 E.F.
Q2 E.F.
IC1
H SYNC SEPA
AGC
SEP
R11
AGC GAIN
Q8 E.F.
AMP Q6 Q7
LPF1
Q5 E.F.
Q4 E.F.
IC2
ADC
1H DL
1H DL
BPF
BPF
BPF
DL
DAC
DAC
LOGICAL COMB
LOGIC
4fsc
COMB Y LEVEL ADJ
COMB C LEVEL ADJ
R33
R34
21B INPUT C OUT (X)
21A INPUT C OUT (G)
Q29 E.F.
IC5
SEP
2B C IN (X)
2A C IN (G)
19B INPUT C IN (X)
19A INPUT C IN (G)
Q31 E.F.
Q30 E.F.
CN2
21B LPF Y (X)
21A LPF Y (G)
22B DOC PULSE (X)
22A DOC PULSE (G)
DG COMPE
S MODE
VIDEO EE
Q51 E.F.
BPF1
IC7
BPF
REC
PB
ACC
MAIN BM
PB
REC
BURST DE EMP
TP8
TP11
OFF
ON
SW1
NOR
IC8
DOC
Q52 E.F.
R259
1H LEV.
R166
1H PHASE
LOGICAL COMB
2B PB C (X)
2A PB C (G)
1B REC C (X)
1A REC C (G)
Q42 E.F.
REC KILLER
LPF
CHROMA ACC
BURST EMPHA
VCXO
X4
TP5
9B D FF (X)
9A D FF (G)
5B ROT CTL (X)
5A ROT CTL (G)
R147
320fH ADJ
XTAL
C89
VCXO ADJ
Q44 E.F.
TRAP
R159
Q43 E.F.
4fsc
CNR PHASE
6B SC CLOCK (X)
6A SC CLOCK (G)
C PHAS
R208
IC12
DEM 90° SHIFTER
10dB AMP
FSC IN
TINT 90° SHIFTER
TINT CTL AMP
TINT CTL
TINT 90° SHIFTER
C IN
DEM
LPF
CLAMP CNC
DL
DL
CAI DET C
OFFSET CANCEL
CAI
DL
6dB AMP
TEST SW
MOD
COLOR CTL AMP
COLOR CTL
19B CRI Y (X)
19A CRI Y (G)
15B BURST GATE P (X)
15A BURST GATE P (G)
CLAMP SLICE SYNC SEP
LPF
CAI DET Y
CAI LEV.CTL
MMV PULSE GEN
TP13
R201
Y/C DELAY ADJ
R219
R220
CARRI BAL.1
CARRI BAL.2
8B PB SYNC (X)
8A PB SYNC (G)
Q91
7B B/W


Q88
NOISE CANCEL
Q21
E.F.
CN2
PB Y(X) 17B
PB Y(G) 17A
CN1
V PULSE(X) 7B
V PULSE(G) 7A
Q11
Q12, 13
Q14
IC3
Q15
IC4
LPF2
AMP
BIAS
Q28
SEARCH
L:OFF
Q17
Q18, 19
Q20
LPF3
SEP
Q16
Q22
VIDEO EE
EE Y(X) 22B
EE Y(G) 22A
Q78
Q79
OUT BUFFER
TP1
TP2
IC6
Q32, 33
Q34
Y OUT(X) 16B
Y OUT(G) 16A
C OUT(X) 15B
C OUT(G) 15A
L18, C132
TRAP
IC9
CCD
Q70
BPF3
Q74
Q35
TP3
Q71
Q72, 73
Q36
Q80, 81
COMP OUT(X) 17B
COMP OUT(G) 17A
COMP 2 OUT(X) 4B
COMP 2 OUT(G) 4A
R253
DOC PHS
R250
DOC LEV
Q68
BPF2
ON
OFF
PB KILLER
Q50
TP6
Q69
CNR
R258
2H LEV.
TP12
Δ Y(X) 20B
Δ Y(G) 20A
Q67
E Q AMP
Q48
R164
2H PHASE
CNR 0H C(X) 4B
CNR 0H C(G) 4A
R156
CNR LEV.
CNR 1H C(X) 3B
CNR 1H C(G) 3A
C PHASE
R208
EDIT
Q64
Q65
VIDEO EE
IC13
SERI→PARA SHIFT RESISTOR
EDIT
SP
S MODE
SERCH
SEP
Q63
Q83
BPF
EQ AMP
R217
BURST LEV
VIDEO DATA OUT 11B
S DATA CLOCK 11A
VIDEO REC 13A
VIDEO EE 12A
STROBE 12B
SP 14B
COLOR CTL AMP
COLOR CTL
C LEV.
R221
10 VIDEO 1

4.5 VIDEO-2 BLOCK DIAGRAM

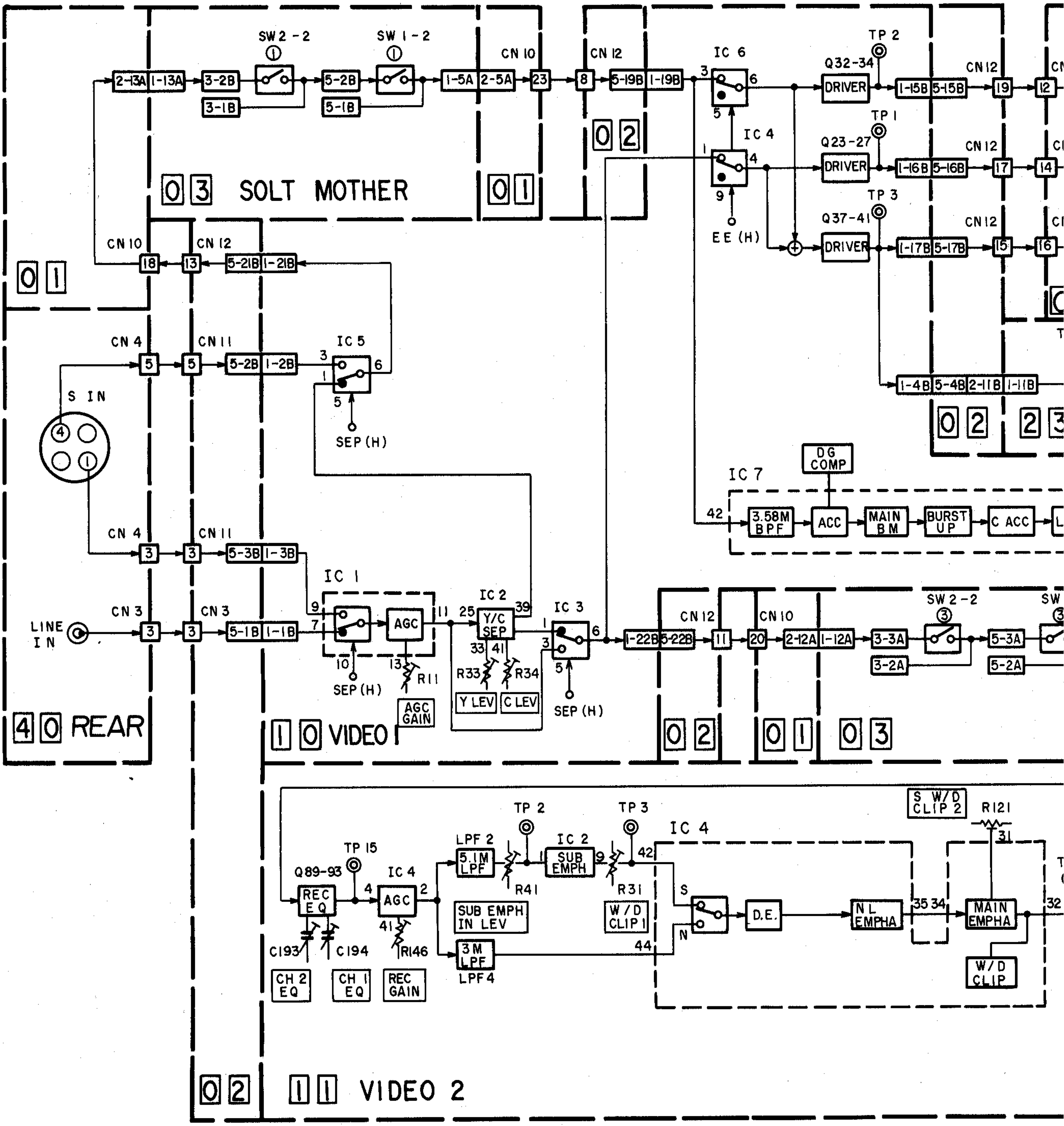

CN2
3B CNR 1H C(X)
3A CNR 1H C(G)
6B SC CLOCK(X)
6A SC CLOCK(G)
4B CNR 0H C(X)
4A CNR 0H C(G)
Q3 E.F.
SC CLOCK
Q1 E.F.
BPF1
Q2 E.F.
S W/D CLIP ADJ 1
IC
CCD
SUB EMPHA IN LEV ADJ
R41
LPF2
Q9, 10 PHASE EQ
Q8 E.F.
TP2
IC2 N.L. EMPHA.
R31
Q7 E.F.
VIDEO EE
SP
TP3
LPF4
Q36, 37 PHASE EQ
Q35 E.F.
R146
N W/D CLIP ADJ
Q32 E.F.
YNR BAL
REC fQ CH2
REC fQ CH1
TP15
IC4
CN1
20B VITC MIX OUT (X)
20A VITC MIX OUT (G)
Q89, 90 AMP
Q93 E.F.
S PB Y LEV ADJ
AGC
REC
PB
N
S
C193
C194
R174
CN1
9B D FF (X)
9A D FF (G)
L:OFF
Q91
Q92
R171
N PB Y LEV1
IC3
AGC DET
SYNC SEPA
DETAIL ENHANCER
SUB NC
APT
NC
V.APT
DEEMPHA MUTE
MAIN DEEMPHA
S SP RFEQ CH2
S EP RFEQ ADJ
CN3
8 AGC FM (X)
9 AGC FM (G)
S-VHS HPF
S-VHS RF EQ
R212
R213
R218
S SP RFEQ CH1
Q55
Q56
Q58
EP
SERCH
PB Y C
R243
Q65
IC5
1H DL
2H DL
CCD
SC CLOCK
Q62 AMP
LPF5
Q65 AMP
Q69 AMP
LPF6
Q72 AMP
VHS HPF
VHS RF EQ
N RFEQ CH1
R188
R189
N RFEQ CH2
Q47
Q48
Q103, 104 AMP
Q105 E.F.
TP20
TP4
PEAK RECT
VIDEO EE
L:OFF
R86
TRACKING DC
Q25, 26 PHASE EQ
CN3
3 PB FM (X)
4 PB FM (G)
Q20 AMP
Q97 E.F.
TRAP
Q23 E.F.
LPF3
S
N
Q27 E.F
S-VHS PB
CN1
12A VIDEO EE
14B SP
10B S MODE
10A SERCH
14A EDIT
VIDEO EE
VIDEO EE
SP
SP
S MODE
S MODE
SERCH
EDIT
6
5
4
3
2
1
A
B
C

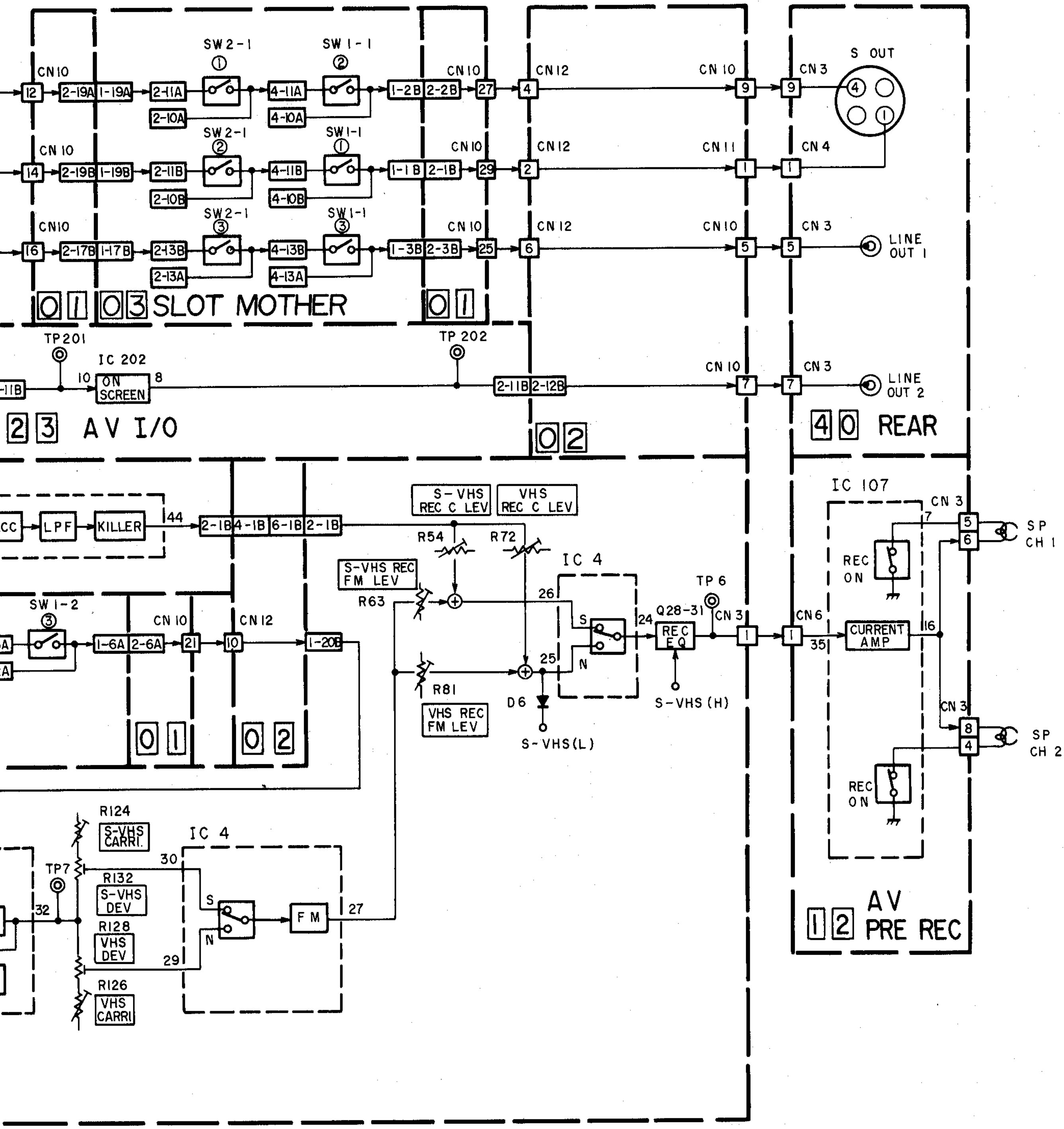


CN2
△Y (X) 20B
△Y (G) 20A
CN2
LPF Y (X) 21B
LPF Y (G) 21A
IC1
CCD
E.F.
Q4
LPF1
AMP
Q5
Q6
TP1
R12
YNR NC BAL ADJ
E.F.
Q34
S CARRI /DEVI ADJ1
S W/D CLIP ADJ2
R124
R126
R121
N CARRI DEV1 ADJ1
N CARRI DEV1 ADJ2
R128
TP7
R132
S CARH/DEV1 ADJ2
TP16
S REC FM LEV ADJ
S REC C LEV ADJ
R63
R54
CARRI. INT.
YNR
NL EMPHA /DEEMPHA
S:THRU
MAIN EMPHA
W/D CLIP
PB
REC
FM MOD
S-VHS TRAP
VHS HPF
PHASE EQ
PHASE EQ
R81
R72
N REC C LEV ADJ
CN2
REC C (X) 1B
REC C (G) 1A
SYNC EXP
LOGIC
FM DET
DOC DET
N REC FM LEV ADJ
TP8
MAIN DEEMPHA
SUB LPF
SUB LPF
F M DEMOD
DOUBLE LIMITER
CN2
DOC PULSE (X) 22B
DOC PULSE (G) 22A
CN1
S-VHS PB 13B
TP6
REC EQ
CN3
REC FM (X) 1
REC FM (G) 2
PB Y COMB 1
Q65
Q66
E.F.
Q102, 103
Q67
DL1
AMP
TP14
SYNC LIN
Q85
DL2, DL3
D L
Q86, 87
Q88
CN2
CRI Y (X) 19B
CRI Y (G) 19A
Q72
Q96
Q73
R389
PB Y COMB2
LIMITER
R252
N PB 1 LEV 2
TP17
TP24
PB Y (X) 6B
PB Y (G) 6A
CN2
R273
△Y ADJ
Q74
R279
PB Y COMB 2
TP4
CN1
TRACKING DC (X) 1B
TRACKING DC (G) 1A
TP5
Q27
S-VHS PB
CN1
PB C (X) 2B
PB C (G) 2A
TP9
D8
D7
CN3
SYNC DOP (X) 13
SYNC DOP (G) 14
CN1
PB SYNC (X) 8B
PB SYNC (G) 8A

1 1 VIDEO 2

4.6 VIDEO RECORDING SIGNAL BLOCK DIAGRAM

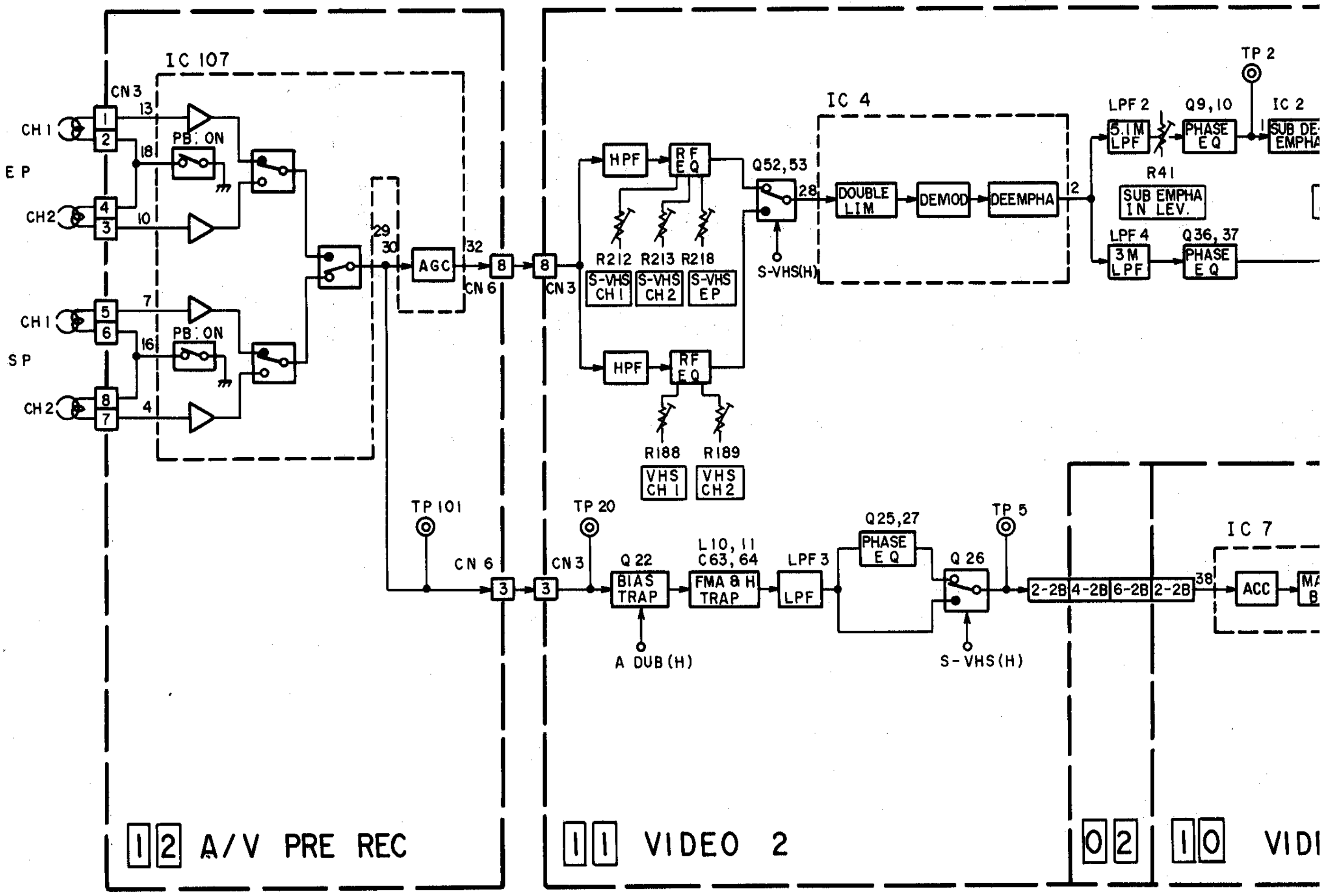

SW2-2
①
SW1-2
①
2-13A
1-13A
3-2B
3-1B
5-2B
5-1B
1-5A
2-5A
CN10
23
CN12
8
5-19B
1-19B
IC 6
3
6
5
IC 4
1
4
9
EE (H)
TP 2
Q32-34
DRIVER
1-15B
5-15B
CN12
19
12
TP 1
Q23-27
DRIVER
1-16B
5-16B
CN12
17
14
TP 3
Q37-41
DRIVER
1-17B
5-17B
CN12
15
16
03 SOLT MOTHER
01
02
CN10
18
CN12
13
5-21B
1-21B
01
CN 4
5
CN11
5
5-2B
1-2B
IC 5
3
6
1
5
SEP (H)
1-4B
5-4B
2-11B
1-11B
02
23
S IN
④
①
DG COMP
IC 7
42
3.58M BPF
ACC
MAIN BM
BURST UP
C ACC
CN 4
3
CN11
3
5-3B
1-3B
IC 1
9
7
AGC
11
10
SEP (H)
13
R11
AGC GAIN
IC 2
25
Y/C SEP
39
33
41
R33
R34
Y LEV
C LEV
IC 3
1
3
6
5
SEP (H)
LINE IN
CN 3
3
CN 3
3
5-1B
1-1B
1-22B
5-22B
CN12
11
CN10
20
2-12A
1-12A
3-3A
3-2A
SW2-2
③
5-3A
5-2A
SW
40 REAR
10 VIDEO 1
02
01
03
S W/D CLIP 2
R121
31
TP 2
TP 3
LPF 2
IC 2
TP 15
5.1M LPF
1
SUB EMPH
9
42
IC 4
Q89-93
4
IC 4
AGC
2
REC EQ
R41
R31
S
D.E.
NL EMPHA
35
34
MAIN EMPHA
32
SUB EMPH IN LEV
W/D CLIP 1
N
41
C193
C194
R146
3M LPF
LPF 4
44
W/D CLIP
CH 2 EQ
CH 1 EQ
REC GAIN
02
11 VIDEO 2

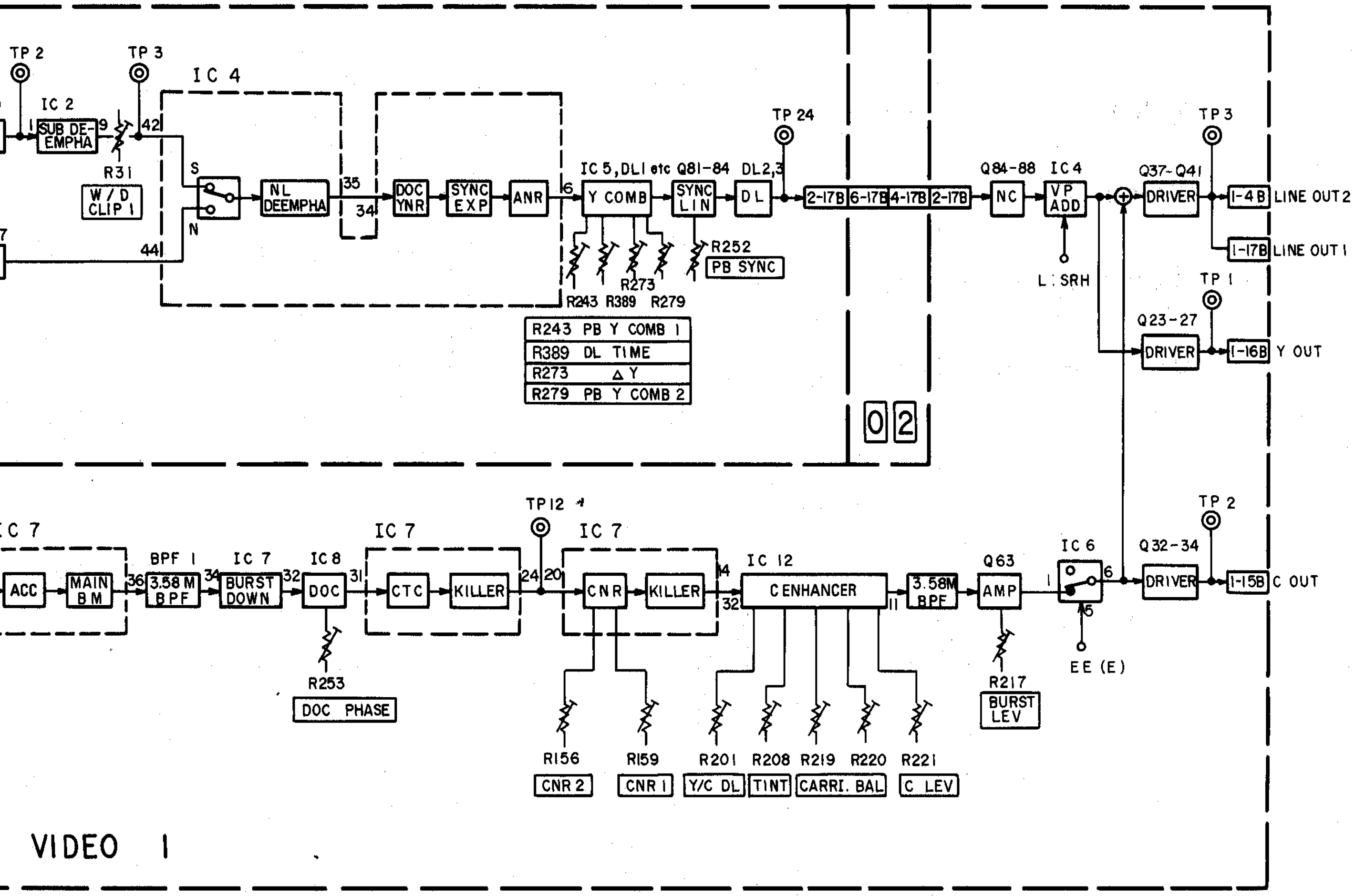

SW2-1 ①
SW1-1 ②
CN10
12
2-19A
1-19A
2-11A
2-10A
4-11A
4-10A
1-2B
2-2B
27
CN12
4
CN10
9
CN3
9
S OUT
④
①
SW2-1 ②
SW1-1 ①
14
2-19B
1-19B
2-11B
2-10B
4-11B
4-10B
1-1B
2-1B
29
2
CN11
1
CN4
1
SW2-1 ③
SW1-1 ③
16
2-17B
1-17B
2-13B
2-13A
4-13B
4-13A
1-3B
2-3B
25
6
5
LINE OUT 1
01 03 SLOT MOTHER
01
TP201
IC 202
10
ON SCREEN
8
-11B
TP 202
2-11B
2-12B
7
LINE OUT 2
23 AV I/O
02
40 REAR
CC
LPF
KILLER
44
2-1B
4-1B
6-1B
2-1B
S-VHS REC C LEV
VHS REC C LEV
R54
R72
IC 4
S-VHS REC FM LEV
R63
26
SW1-2 ③
CN10
21
CN12
10
1-20B
1-6A
2-6A
6A
A
25
R81
VHS REC FM LEV
D6
S-VHS(L)
S
N
24
TP6
Q28-31
REC EQ
S-VHS(H)
CN3
1
CN6
1
35
CURRENT AMP
16
IC 107
CN3
7
5
6
SP CH 1
REC ON
CN3
8
4
SP CH 2
REC ON
01
02
R124
S-VHS CARRI.
IC 4
30
TP7
32
R132
S-VHS DEV
R128
VHS DEV
29
R126
VHS CARRI
S
N
FM
27
12 AV PRE REC

CIRCUIT			S-VHS	VHS
		MENU No.101	SP	SP
Y	NL EMPHASIS		OFF	∗ON
	YNR	EDIT or DUB	OFF	YNR OFF
		OFF (PB)／ENH／CNR OFF	OFF	YNR OFF
	DETAIL ENHANCER	EDIT or DUB	OFF	OFF
		OFF (PB)／ENH／CNR OFF	OFF	ON

Effectiveness of each circuit is set by the mode i.e. SP／EP.
Mark∗ shows less effective compare with the ONs without∗.

4.7 VIDEO PLAYBACK SIGNAL BLOCK DIAGRAM


IC 107
CN3
CH1
EP
CH2
CH1
SP
CH2
1
2
4
3
5
6
8
7
13
18
10
7
16
4
PB: ON
PB: ON
29
30
AGC
32
8
CN 6
8
CN 3
TP 101
CN 6
3
3
CN 3
TP 20
HPF
RF EQ
HPF
RF EQ
R212
R213
R218
S-VHS CH1
S-VHS CH2
S-VHS EP
R188
R189
VHS CH1
VHS CH2
Q52,53
28
S-VHS(H)
IC 4
DOUBLE LIM
DEMOD
DEEMPHA
12
TP 2
LPF 2
5.1M LPF
Q9,10
PHASE EQ
IC 2
SUB DE-EMPHA
R41
SUB EMPHA IN LEV.
LPF 4
3M LPF
Q36, 37
PHASE EQ
Q 22
BIAS TRAP
A DUB (H)
L10, 11
C63, 64
FMA & H TRAP
LPF 3
LPF
Q25,27
PHASE EQ
Q 26
S-VHS (H)
TP 5
2-2B
4-2B
6-2B
2-2B
38
IC 7
ACC
MA B
12 A/V PRE REC
11 VIDEO 2
02
10 VIDI

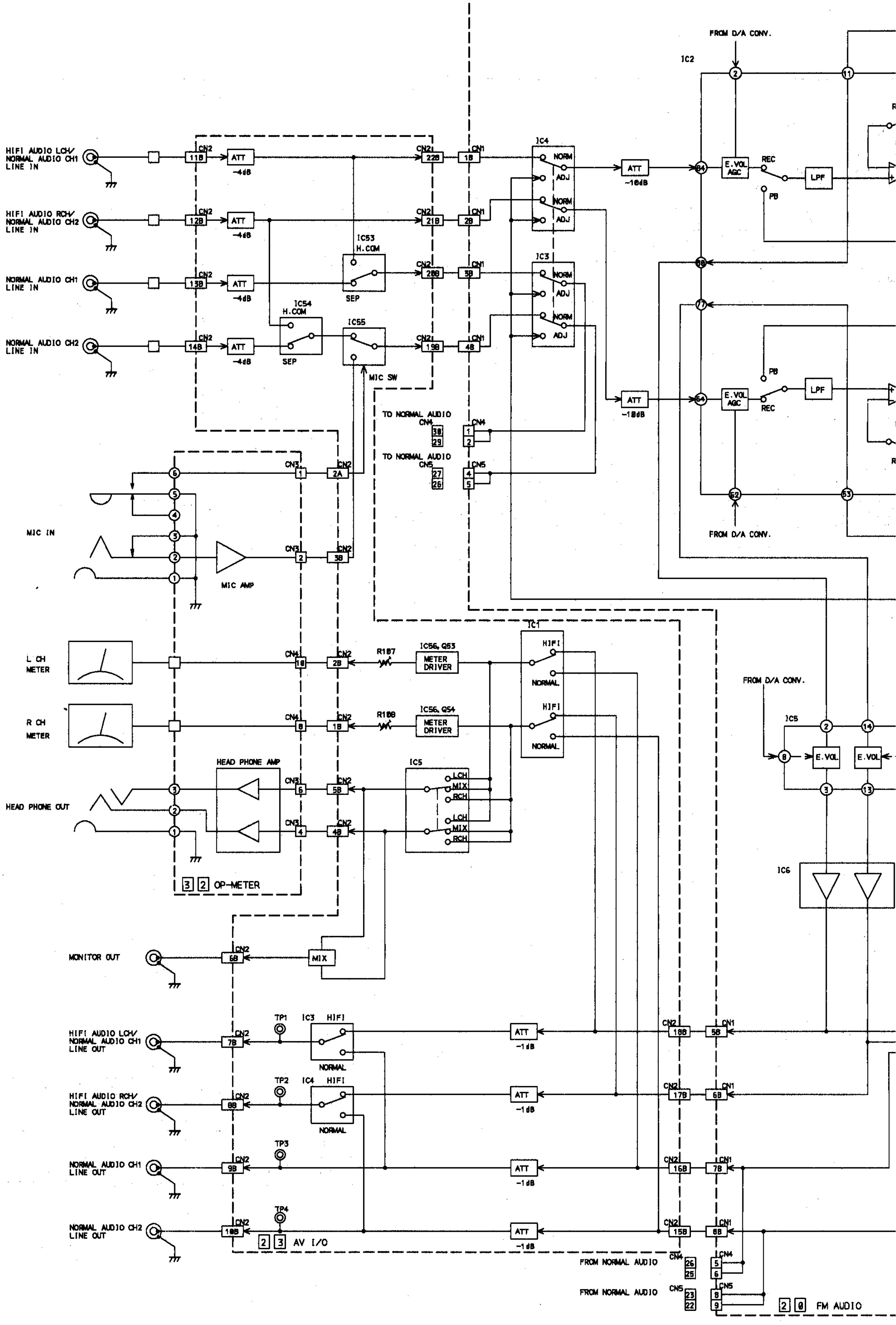

TP 2
TP 3
IC 2
SUB DE-EMPHA
9
42
R31
W/D CLIP 1
IC 4
S
N
NL DEEMPHA
35
34
44
DOC YNR
SYNC EXP
ANR
6
IC 5, DL1 etc
Y COMB
Q81-84
SYNC LIN
DL2,3
DL
R252
PB SYNC
R243 R389 R273 R279
R243 PB Y COMB 1
R389 DL TIME
R273 ΔY
R279 PB Y COMB 2
TP 24
2-17B
6-17B
4-17B
2-17B
02
Q84-88
NC
IC 4
VP ADD
L : SRH
Q37-Q41
DRIVER
TP 3
1-4B
LINE OUT 2
1-17B
LINE OUT 1
TP 1
Q23-27
DRIVER
1-16B
Y OUT
IC 7
ACC
MAIN BM
BPF 1
36
3.58 M BPF
34
IC 7
BURST DOWN
32
IC 8
DOC
31
R253
DOC PHASE
IC 7
CTC
KILLER
24
TP12
20
IC 7
CNR
KILLER
14
IC 12
C ENHANCER
32
11
3.58M BPF
Q63
AMP
R217
BURST LEV
IC 6
1
6
5
EE (E)
Q32-34
DRIVER
TP 2
1-15B
C OUT
R156
CNR 2
R159
CNR 1
R201
Y/C DL
R208
TINT
R219
CARRI. BAL
R220
R221
C LEV
VIDEO 1

CIRCUIT				S-VHS		VHS	
			MENU No.101	SP	EP	SP	EP
Y	NL DEEMPHASIS			OFF	OFF	*ON	ON
	YNR		EDIT or DUB	OFF	OFF	OFF	LNC
			OFF(PB)/ENH/CNR OFF	LNC	LNC	OFF	YNR
	ANR	NC/SUB NC	EDIT or DUB	OFF	OFF	OFF	OFF
			OFF(PB)/ENH/CNR OFF	*ON	*ON	*ON	ON
		APERTURE CTL	EDIT or DUB/OFF(PB)/CNR OFF	OFF	OFF	OFF	OFF
			ENH	ON	ON	ON	ON
C	CNR		EDIT or DUB/CNR OFF	OFF	OFF	OFF	OFF
			OFF(PB)/ENH	ON	ON	ON	ON
	CROSSTALK CANCELLER			3H	2H	3H	2H

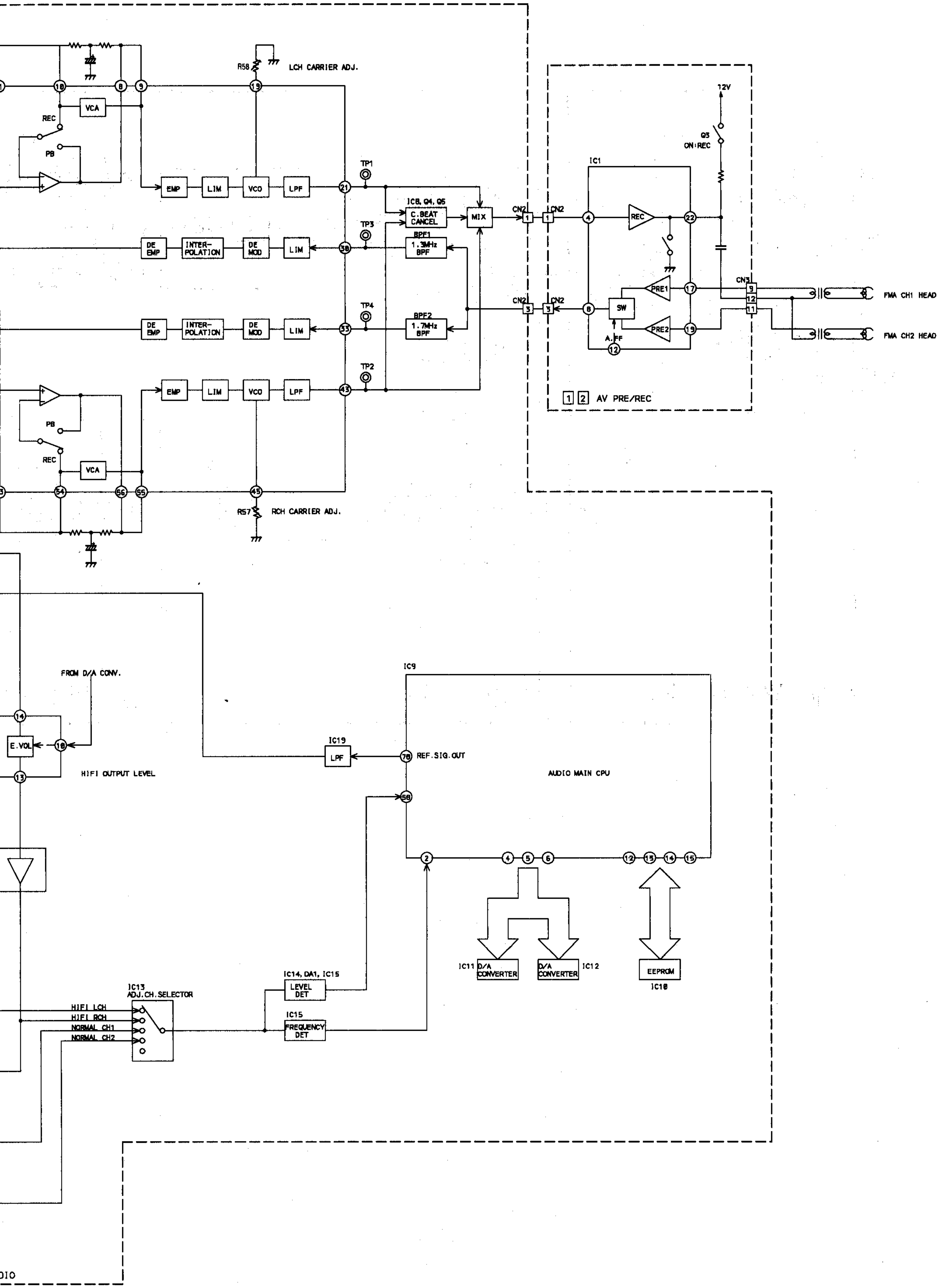
Effectiveness of each circuit is set by the mode i.e. SP/EP.
Mark* shows less effective compare with the ONs without*.

4.8 AUDIO BLOCK DIAGRAM (BR-S800)

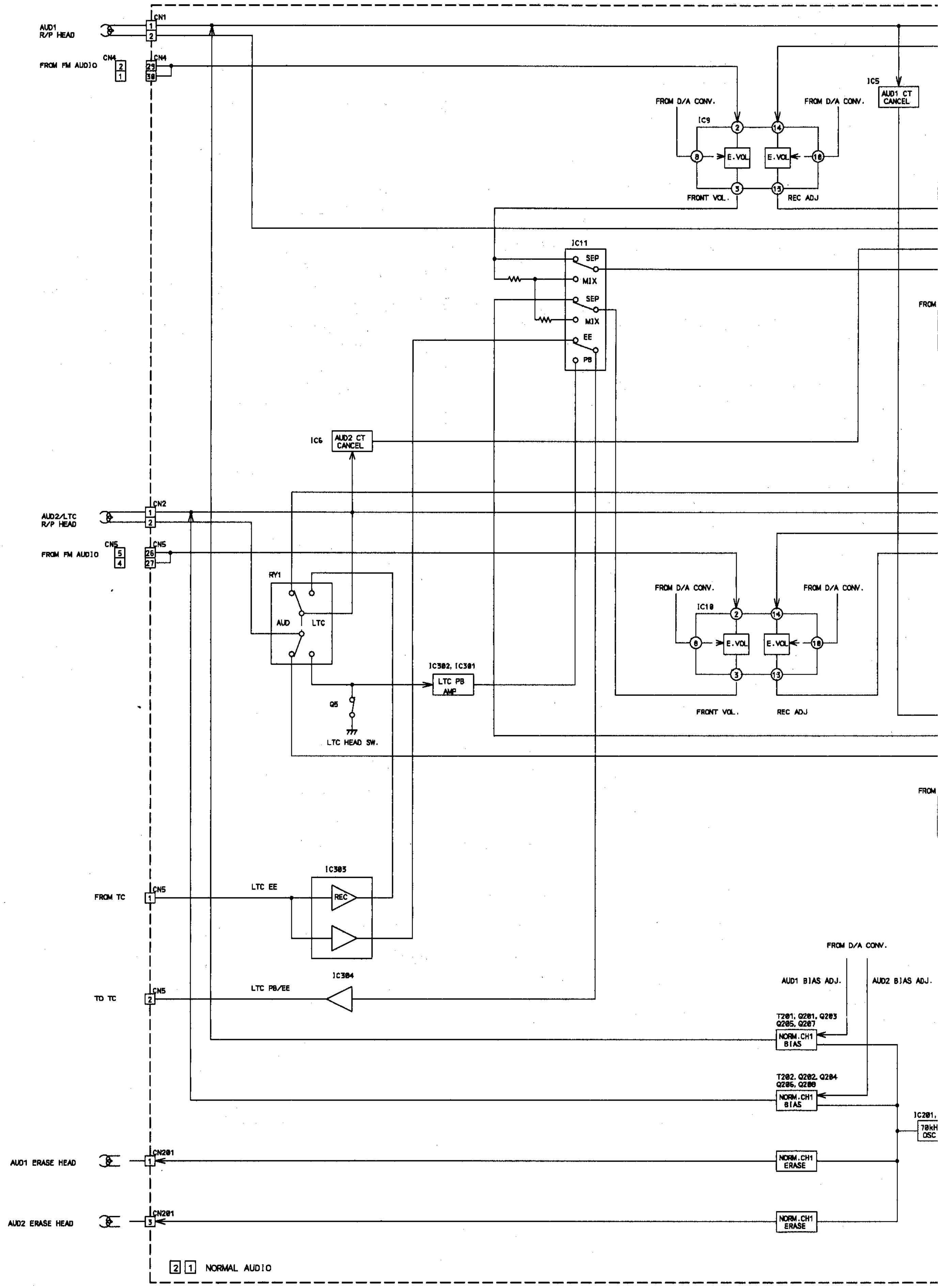
— DIAGRAM (1/2) —

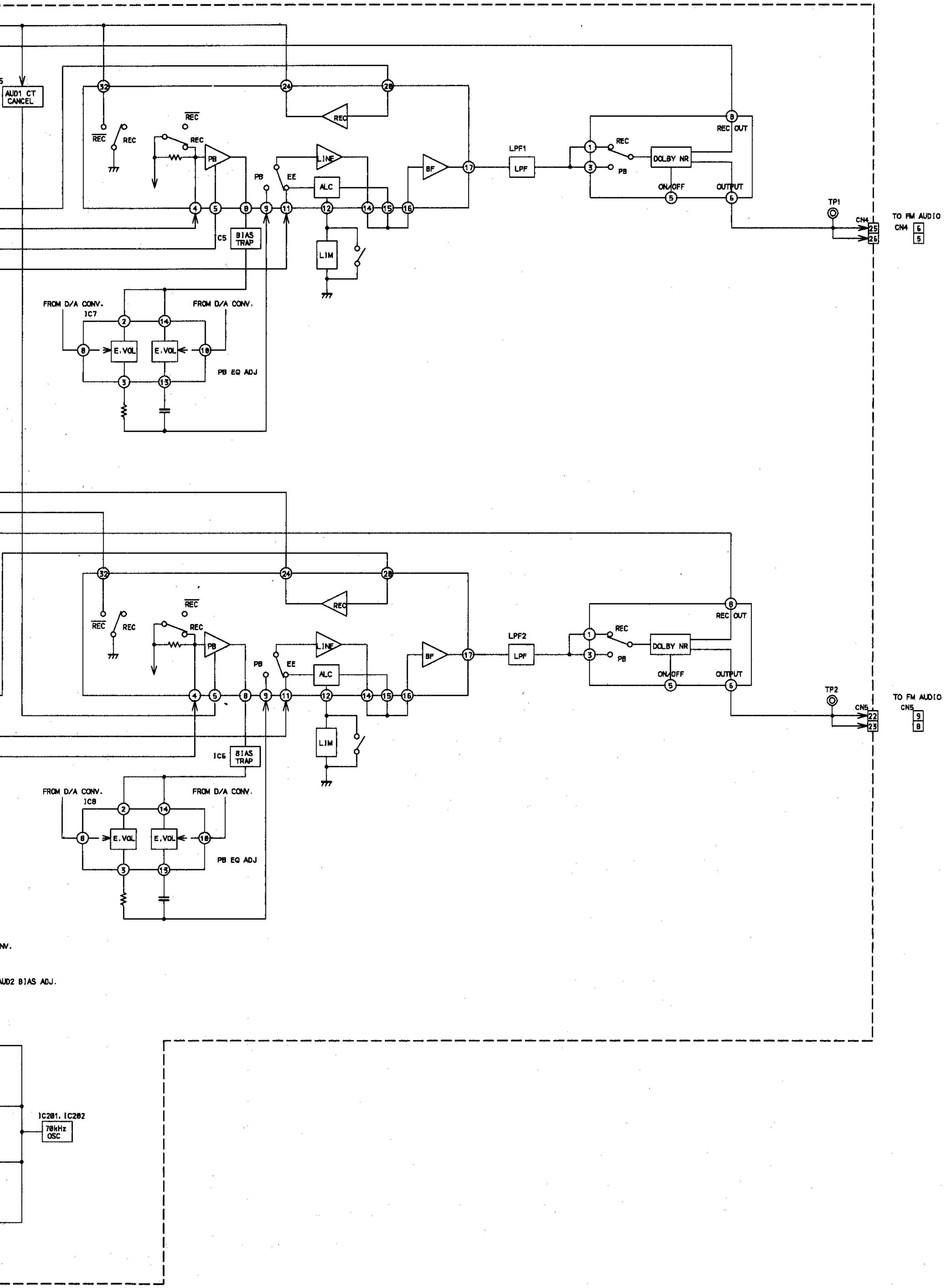


6
5
4
3
2
1
A
B
C
HIFI AUDIO LCH/ NORMAL AUDIO CH1 LINE IN
HIFI AUDIO RCH/ NORMAL AUDIO CH2 LINE IN
NORMAL AUDIO CH1 LINE IN
NORMAL AUDIO CH2 LINE IN
CN2
11B
12B
13B
14B
ATT
-4dB
IC53
H.COM
SEP
IC54
H.COM
SEP
IC55
MIC SW
22B
21B
20B
19B
CN1
1B
2B
3B
4B
IC4
NORM
ADJ
IC3
NORM
ADJ
ATT
-10dB
TO NORMAL AUDIO CN4
30
29
TO NORMAL AUDIO CN5
27
26
CN4
1
2
CN5
4
5
FROM D/A CONV.
IC2
2
11
64
60
77
54
52
53
E.VOL AGC
REC
PB
LPF
MIC IN
6
5
4
3
2
1
CN3
1
2
2A
3B
MIC AMP
L CH METER
R CH METER
CN4
10
8
2B
1B
R107
R108
IC56, Q53 METER DRIVER
IC56, Q54 METER DRIVER
IC1
HIFI
NORMAL
HEAD PHONE AMP
HEAD PHONE OUT
IC5
LCH
MIX
RCH
6
4
5B
4B
3 2 OP-METER
FROM D/A CONV.
IC5
8
2
14
3
13
E.VOL
IC6
MONITOR OUT
6B
MIX
HIFI AUDIO LCH/ NORMAL AUDIO CH1 LINE OUT
HIFI AUDIO RCH/ NORMAL AUDIO CH2 LINE OUT
NORMAL AUDIO CH1 LINE OUT
NORMAL AUDIO CH2 LINE OUT
7B
8B
9B
10B
TP1
TP2
TP3
TP4
IC3 HIFI
IC4 HIFI
NORMAL
ATT
-1dB
18B
17B
16B
15B
5B
6B
7B
8B
2 3 AV I/O
FROM NORMAL AUDIO CN4
26
25
FROM NORMAL AUDIO CN5
23
22
CN4
5
6
CN5
8
9
2 0 FM AUDIO

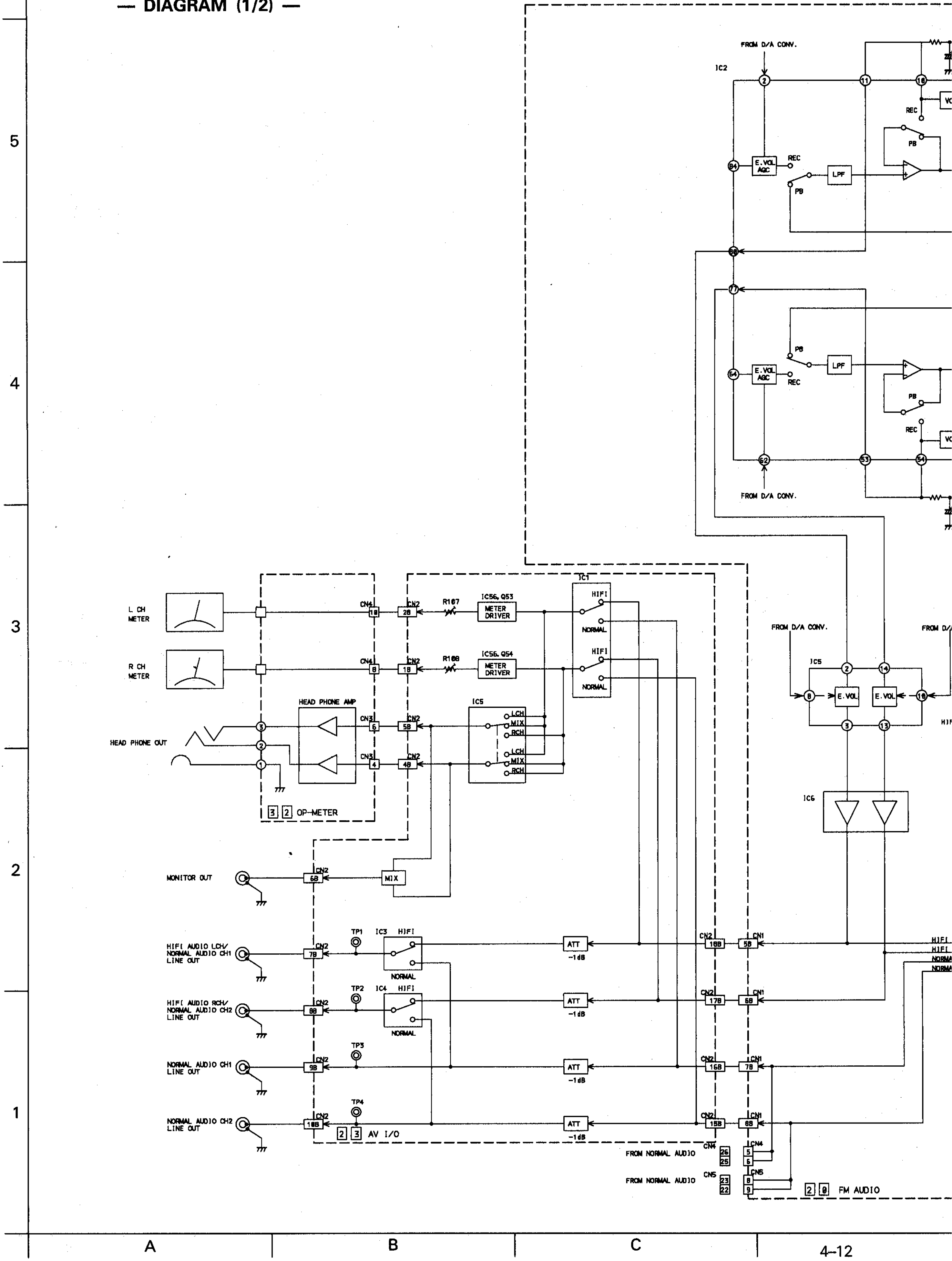

R58
LCH CARRIER ADJ.
VCA
REC
PB
EMP
LIM
VCO
LPF
TP1
IC8, Q4, Q5
C.BEAT CANCEL
MIX
TP3
BPF1
1.3MHz BPF
DE EMP
INTER-POLATION
DE MOD
TP4
BPF2
1.7MHz BPF
TP2
RCH CARRIER ADJ.
R57
CN2
IC1
12V
Q3
ON:REC
SW
PRE1
PRE2
A.FF
CN3
FMA CH1 HEAD
FMA CH2 HEAD
1 2 AV PRE/REC
FROM D/A CONV.
E.VOL
HIFI OUTPUT LEVEL
IC19
IC9
REF.SIG.OUT
AUDIO MAIN CPU
IC11
D/A CONVERTER
IC12
EEPROM
IC18
IC14, DA1, IC15
LEVEL DET
IC15
FREQUENCY DET
IC13
ADJ.CH.SELECTOR
HIFI LCH
HIFI RCH
NORMAL CH1
NORMAL CH2
DIO

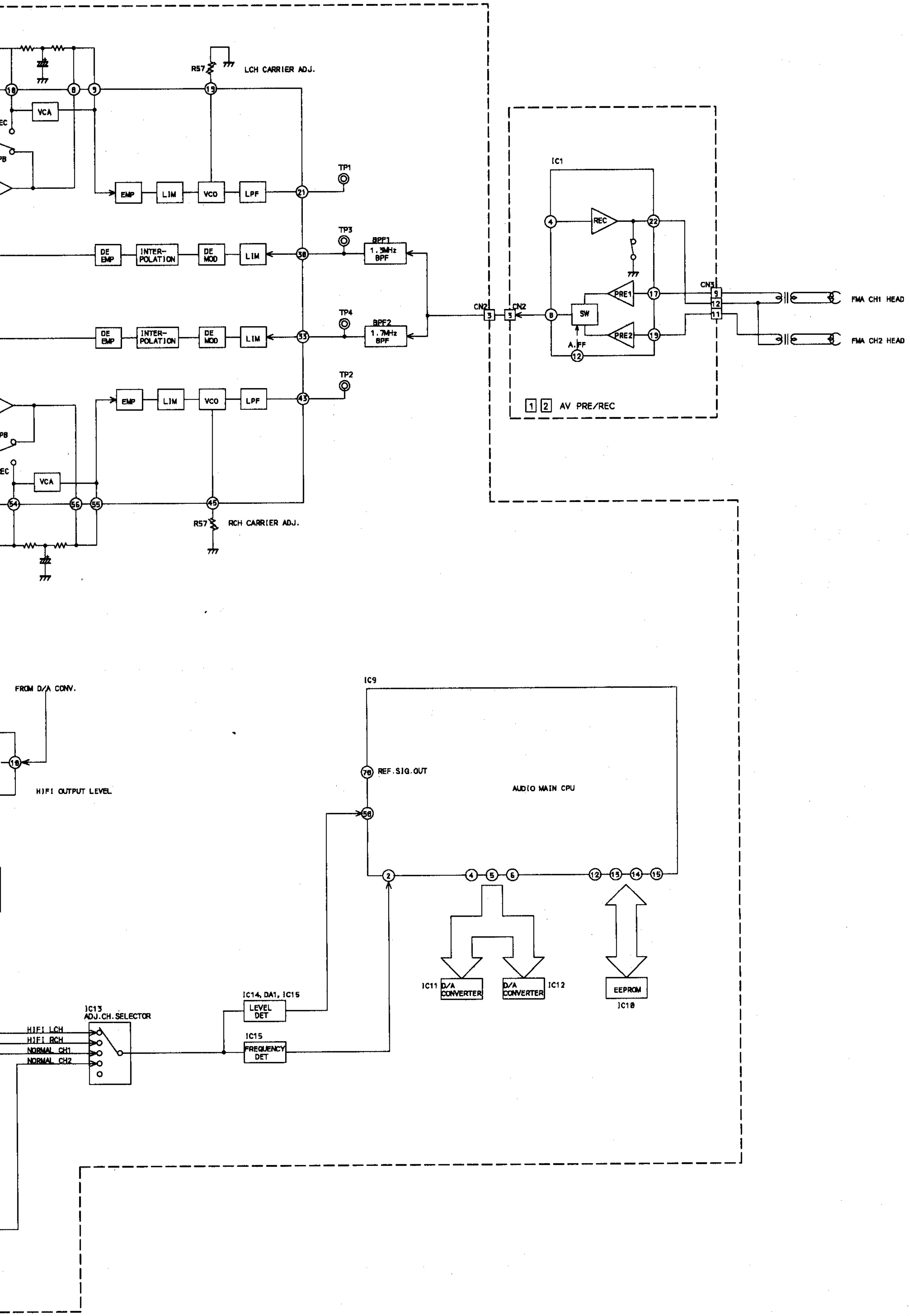
— DIAGRAM (2/2) —


AUD1 R/P HEAD
CN1
1
2
FROM FM AUDIO
CN4
2
1
CN4
29
30
IC5
AUD1 CT CANCEL
FROM D/A CONV.
FROM D/A CONV.
IC9
2
14
8
E.VOL
E.VOL
10
3
13
FRONT VOL.
REC ADJ
IC11
SEP
MIX
SEP
MIX
EE
PB
FROM
IC6
AUD2 CT CANCEL
AUD2/LTC R/P HEAD
CN2
1
2
FROM FM AUDIO
CN5
5
4
CN5
26
27
RY1
AUD
LTC
FROM D/A CONV.
FROM D/A CONV.
IC10
2
14
8
E.VOL
E.VOL
10
3
13
IC302, IC301
LTC PB AMP
Q5
LTC HEAD SW.
FRONT VOL.
REC ADJ
FROM
FROM TC
CN5
1
LTC EE
IC303
REC
FROM D/A CONV.
AUD1 BIAS ADJ.
AUD2 BIAS ADJ.
TO TC
CN5
2
LTC PB/EE
IC304
T201, Q201, Q203
Q205, Q207
NORM.CH1 BIAS
T202, Q202, Q204
Q206, Q208
NORM.CH1 BIAS
IC201,
70kH
OSC
AUD1 ERASE HEAD
CN201
1
NORM.CH1 ERASE
AUD2 ERASE HEAD
CN201
3
NORM.CH1 ERASE
2 1 NORMAL AUDIO
6
5
4
3
2
1
A
B
C

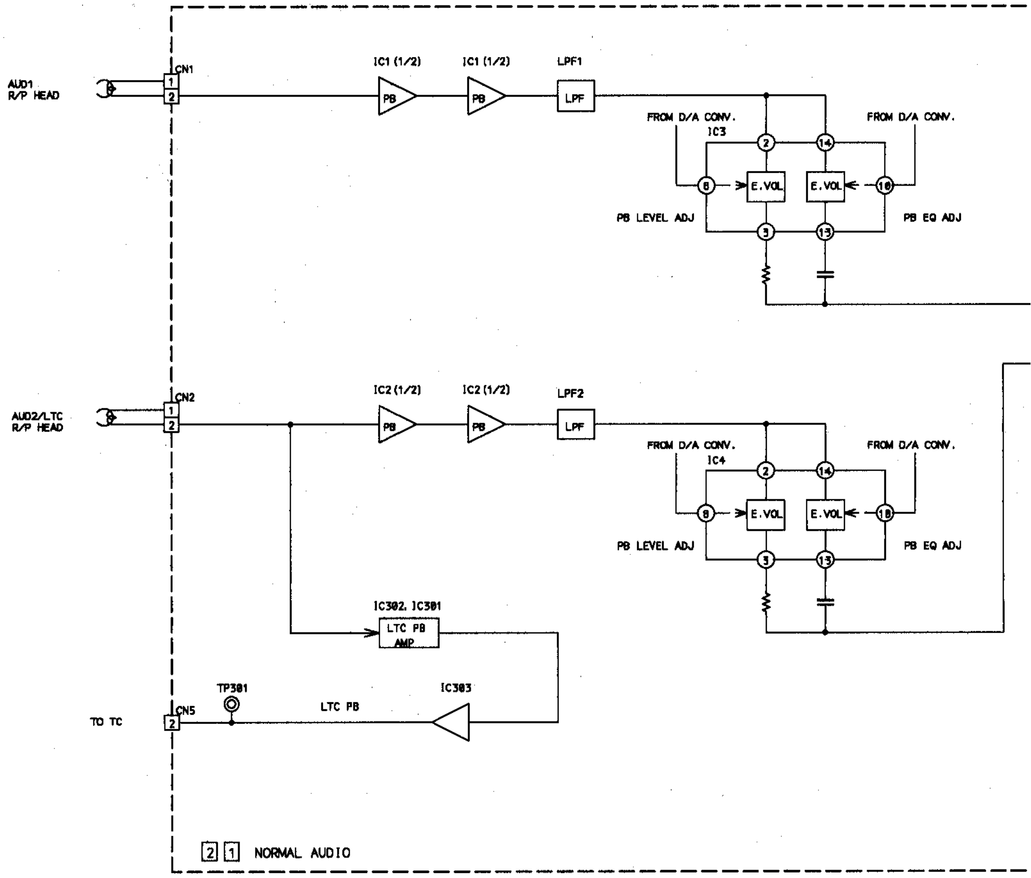

AUD1 CT CANCEL
REC
REC
REC
REC
PB
LINE
PB
EE
ALC
BF
LPF1
LPF
REC
PB
DOLBY NR
REC OUT
ON/OFF
OUTPUT
TP1
CN4
25
26
TO FM AUDIO
CN4
6
5
C5
BIAS TRAP
LIM
FROM D/A CONV.
IC7
FROM D/A CONV.
E.VOL
E.VOL
PB EQ ADJ
LPF2
TP2
CN5
22
23
TO FM AUDIO
CN5
9
8
IC6
BIAS TRAP
IC8
NV.
UD2 BIAS ADJ.
IC201, IC202
70kHz OSC

4.9 AUDIO BLOCK DIAGRAM (BR-S500)
— DIAGRAM (1/2) —

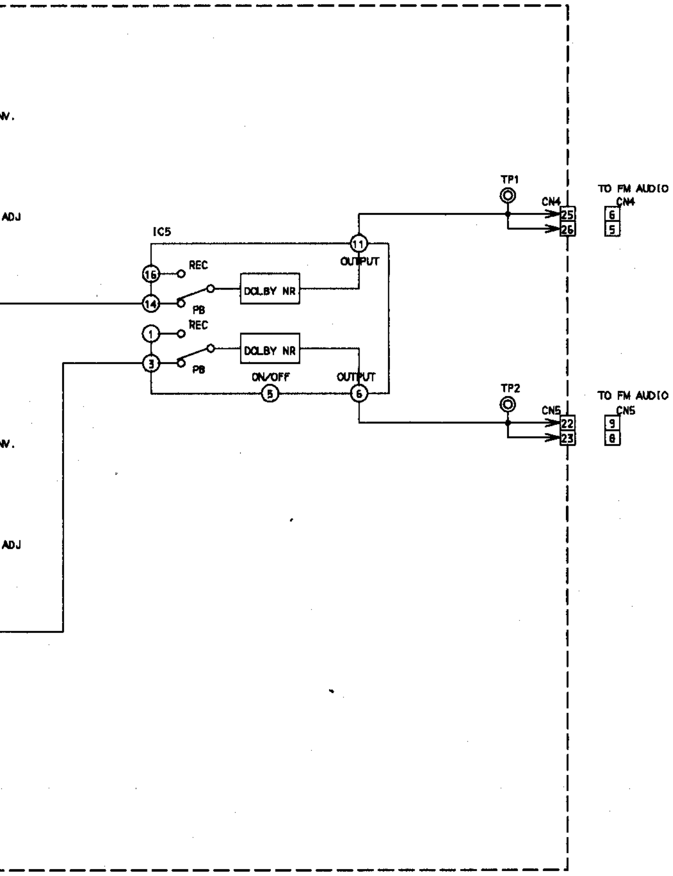

6
5
4
3
2
1
A
B
C
IC2
FROM D/A CONV.
REC
PB
E.VOL AGC
LPF
FROM D/A CONV.
L CH METER
R CH METER
HEAD PHONE OUT
HEAD PHONE AMP
3 2 OP-METER
CN4 10
CN4 8
CN3 6
CN3 4
CN2 20
CN2 18
CN2 5B
CN2 4B
R107
R108
IC56, Q53 METER DRIVER
IC56, Q54 METER DRIVER
IC5
LCH
MIX
RCH
IC1
HIFI
NORMAL
MONITOR OUT
CN2 6B
MIX
HIFI AUDIO LCH/ NORMAL AUDIO CH1 LINE OUT
HIFI AUDIO RCH/ NORMAL AUDIO CH2 LINE OUT
NORMAL AUDIO CH1 LINE OUT
NORMAL AUDIO CH2 LINE OUT
CN2 7B
CN2 8B
CN2 9B
CN2 10B
TP1
TP2
TP3
TP4
IC3
IC4
HIFI
NORMAL
ATT
-1dB
2 3 AV I/O
CN2 18B
CN2 17B
CN2 16B
CN2 15B
CN1 5B
CN1 6B
CN1 7B
CN1 8B
CN4 26 25
CN4 5 6
CN5 23 22
CN5 8 9
FROM NORMAL AUDIO
FROM NORMAL AUDIO
2 0 FM AUDIO
FROM D/A CONV.
IC5
E.VOL
IC6


R57
LCH CARRIER ADJ.
18
8
9
19
VCA
EC
PB
EMP
LIM
VCO
LPF
21
TP1
TP3
DE EMP
INTER-POLATION
DE MOD
LIM
38
BPF1
1.3MHz BPF
TP4
DE EMP
INTER-POLATION
DE MOD
LIM
33
BPF2
1.7MHz BPF
CN2
3
CN2
3
TP2
EMP
LIM
VCO
LPF
43
PB
EC
VCA
54
56
55
45
R57
RCH CARRIER ADJ.
IC1
4
REC
22
PRE1
17
8
SW
A.FF
12
PRE2
19
CN3
9
12
11
FMA CH1 HEAD
FMA CH2 HEAD
1 2 AV PRE/REC
FROM D/A CONV.
18
HIFI OUTPUT LEVEL
IC9
70
REF.SIG.OUT
AUDIO MAIN CPU
56
2
4
5
6
12
13
14
15
IC11
D/A CONVERTER
D/A CONVERTER
IC12
EEPROM
IC10
IC14, DA1, IC15
LEVEL DET
IC15
FREQUENCY DET
IC13
ADJ.CH.SELECTOR
HIFI LCH
HIFI RCH
NORMAL CH1
NORMAL CH2
E
F
G
H

— DIAGRAM (2/2) —

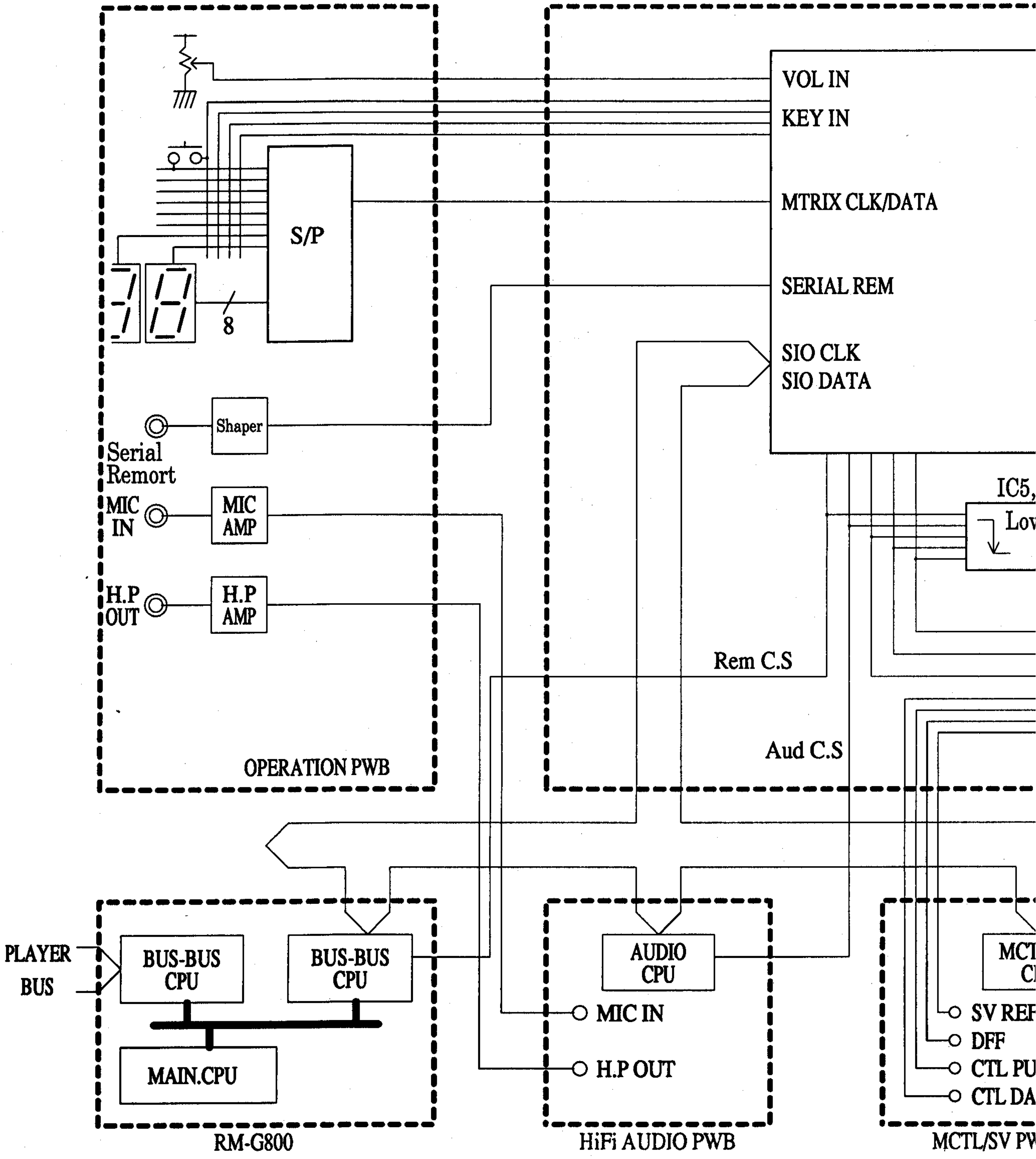


AUD1
R/P HEAD
CN1
1
2
IC1 (1/2)
PB
IC1 (1/2)
PB
LPF1
LPF
FROM D/A CONV.
IC3
2
14
FROM D/A CONV.
6
E.VOL
E.VOL
10
PB LEVEL ADJ
3
13
PB EQ ADJ
AUD2/LTC
R/P HEAD
CN2
1
2
IC2 (1/2)
PB
IC2 (1/2)
PB
LPF2
LPF
FROM D/A CONV.
IC4
2
14
FROM D/A CONV.
6
E.VOL
E.VOL
10
PB LEVEL ADJ
3
13
PB EQ ADJ
IC302, IC301
LTC PB
AMP
TP301
IC303
TO TC
CN5
2
LTC PB
2 1 NORMAL AUDIO

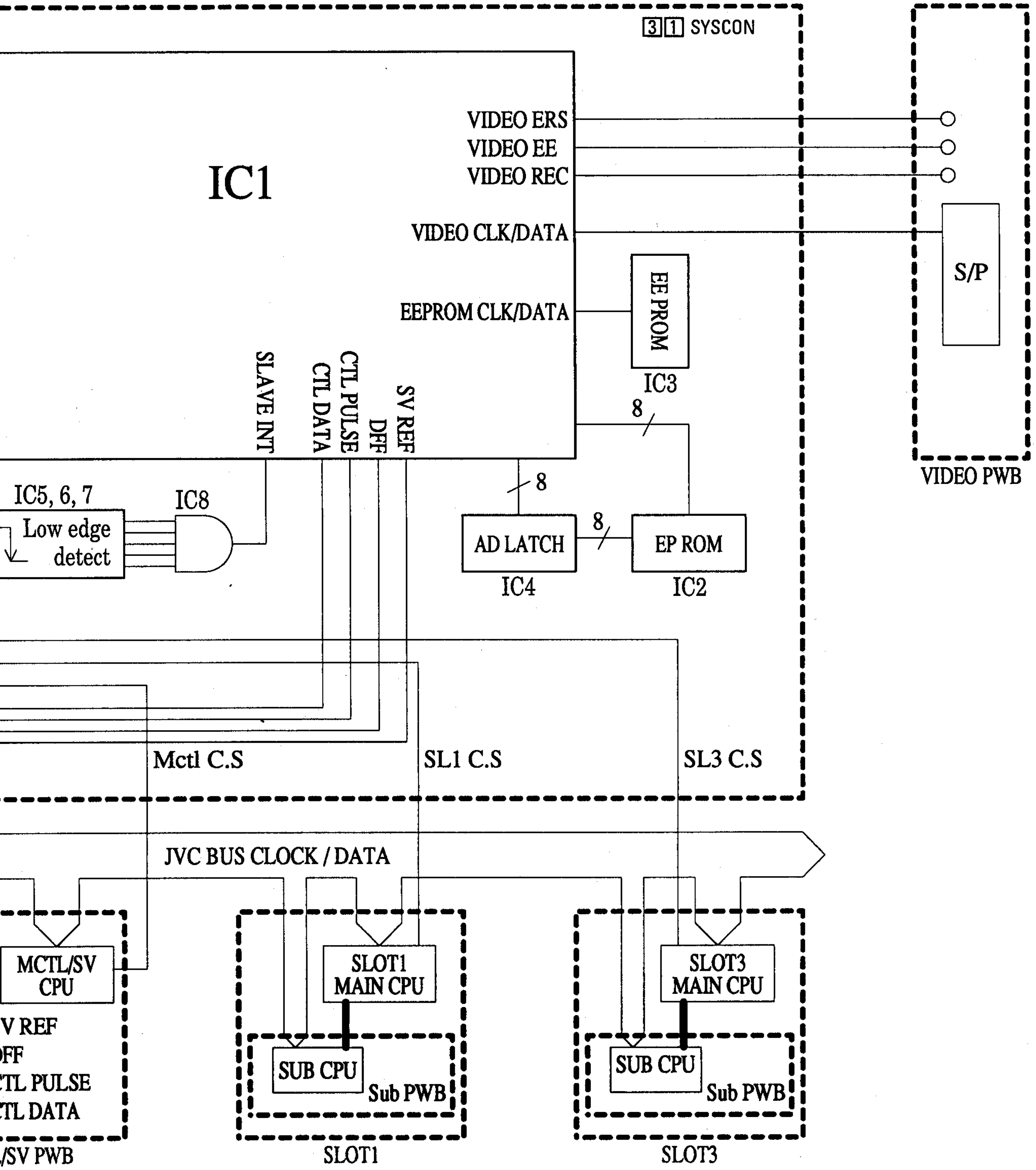


V.
ADJ
IC5
16
REC
14
PB
DOLBY NR
11
OUTPUT
1
REC
3
PB
DOLBY NR
ON/OFF
5
OUTPUT
6
TP1
CN4
25
26
TO FM AUDIO
CN4
6
5
TP2
CN5
22
23
TO FM AUDIO
CN5
9
8
V.
ADJ

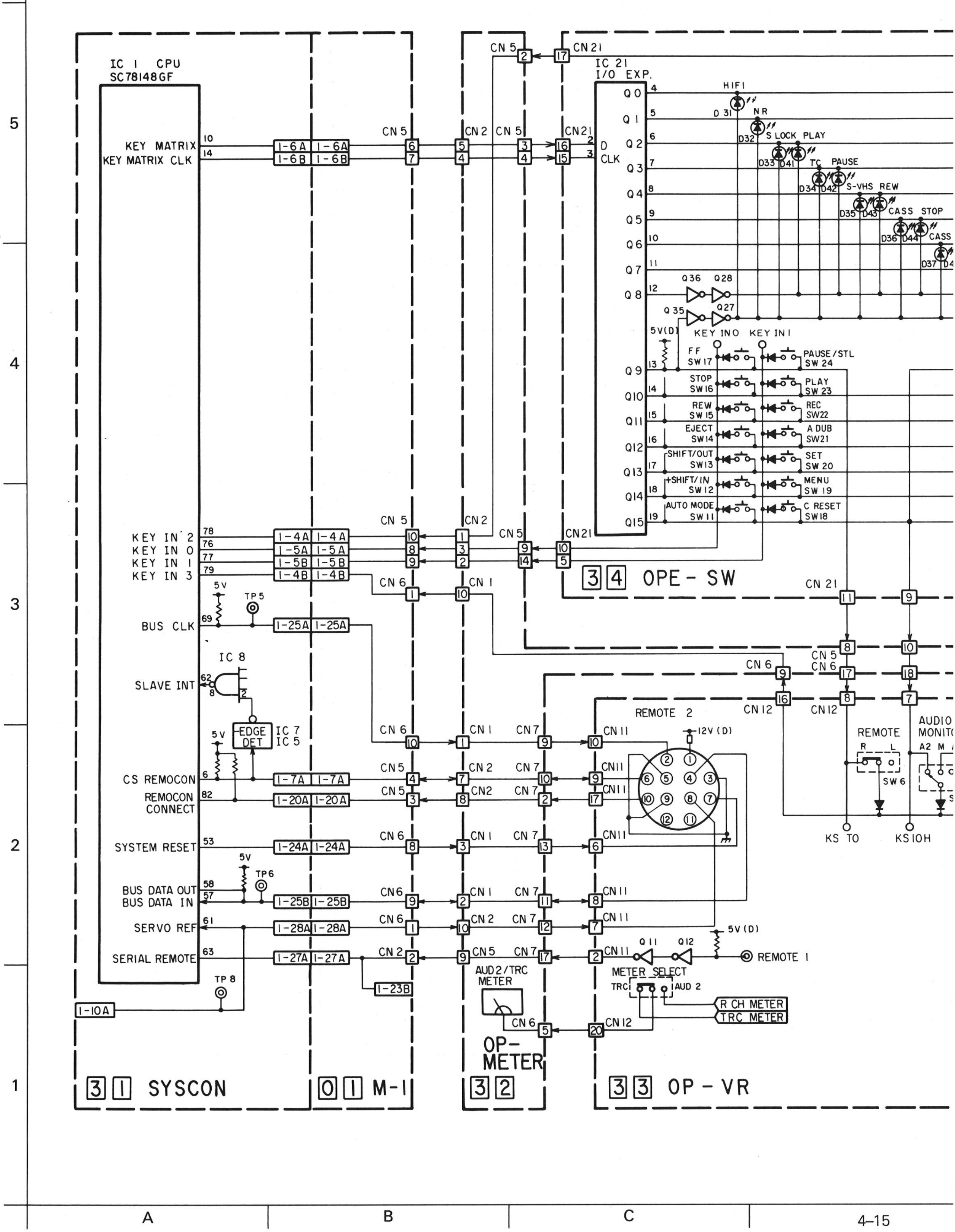
4.10 SYSCON BLOCK DIAGRAM (BR-S800)

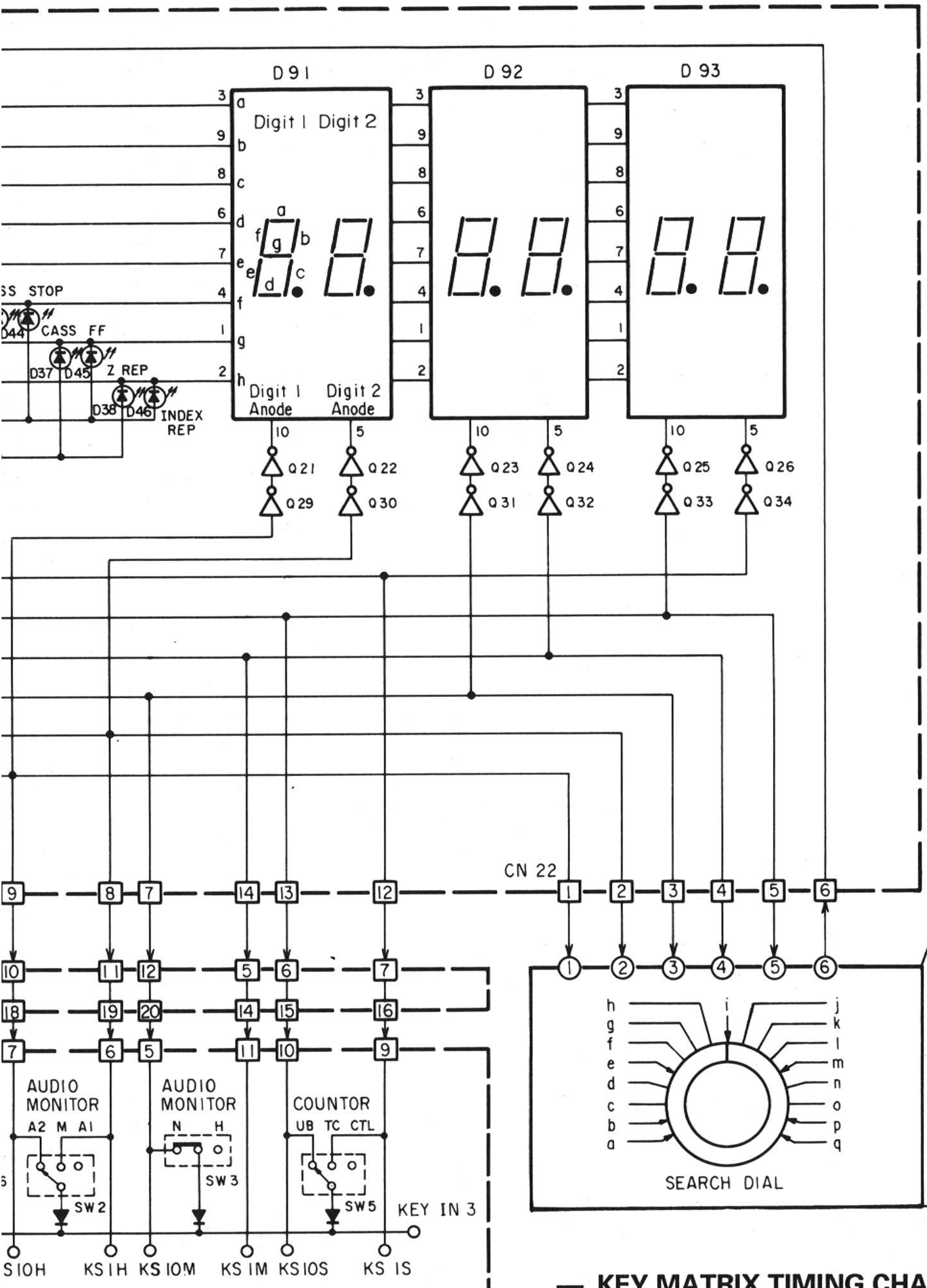


VOL IN
KEY IN
MTRIX CLK/DATA
SERIAL REM
SIO CLK
SIO DATA
S/P
8
Shaper
Serial
Remort
MIC
IN
MIC
AMP
H.P
OUT
H.P
AMP
OPERATION PWB
IC5,
Lov
Rem C.S
Aud C.S
PLAYER
BUS
BUS-BUS
CPU
BUS-BUS
CPU
MAIN.CPU
RM-G800
AUDIO
CPU
MIC IN
H.P OUT
HiFi AUDIO PWB
MCT
C
SV REF
DFF
CTL PU
CTL DA
MCTL/SV PV


3 1 SYSCON
IC1
VIDEO ERS
VIDEO EE
VIDEO REC
VIDEO CLK/DATA
EEPROM CLK/DATA
EE PROM
IC3
8
SLAVE INT
CTL DATA
CTL PULSE
DFF
SV REF
IC5, 6, 7
Low edge detect
IC8
8
AD LATCH
IC4
8
EP ROM
IC2
S/P
VIDEO PWB
Mctl C.S
SL1 C.S
SL3 C.S
JVC BUS CLOCK / DATA
MCTL/SV CPU
V REF
FF
TL PULSE
TL DATA
/SV PWB
SLOT1 MAIN CPU
SUB CPU
Sub PWB
SLOT1
SLOT3 MAIN CPU
SUB CPU
Sub PWB
SLOT3

4.11 OPERATION BLOCK DIAGRAM


6
5
4
3
2
1
A
B
C
IC 1 CPU
SC78148GF
KEY MATRIX
KEY MATRIX CLK
KEY IN 2
KEY IN 0
KEY IN 1
KEY IN 3
BUS CLK
SLAVE INT
CS REMOCON
REMOCON CONNECT
SYSTEM RESET
BUS DATA OUT
BUS DATA IN
SERVO REF
SERIAL REMOTE
TP 5
TP 6
TP 8
5V
IC 8
EDGE DET
IC 7
IC 5
1-6A
1-6B
1-4A
1-5A
1-5B
1-4B
1-25A
1-7A
1-20A
1-24A
1-25B
1-28A
1-27A
1-23B
1-10A
CN 5
CN 2
CN 6
CN 1
CN 7
CN 11
CN 12
CN 21
IC 21
I/O EXP.
D
CLK
Q0
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
Q14
Q15
HIFI
D31
NR
D32
S LOCK PLAY
D33
D41
TC
PAUSE
D34
D42
S-VHS
REW
D35
D43
CASS
STOP
D36
D44
CASS
D37
D4
Q36
Q28
Q35
Q27
5V(D)
KEY IN0
KEY IN1
FF SW17
STOP SW16
REW SW15
EJECT SW14
SHIFT/OUT SW13
+SHIFT/IN SW12
AUTO MODE SW11
PAUSE/STL SW24
PLAY SW23
REC SW22
A DUB SW21
SET SW20
MENU SW19
C RESET SW18
3 4 OPE-SW
REMOTE 2
-12V (D)
REMOTE
R
L
SW6
AUDIO MONIT
A2
M
KS TO
KS10H
Q11
Q12
5V (D)
REMOTE 1
METER SELECT
TRC
AUD 2
R CH METER
TRC METER
AUD2/TRC METER
OP-METER
3 1 SYSCON
0 1 M-1
3 2
3 3 OP-VR

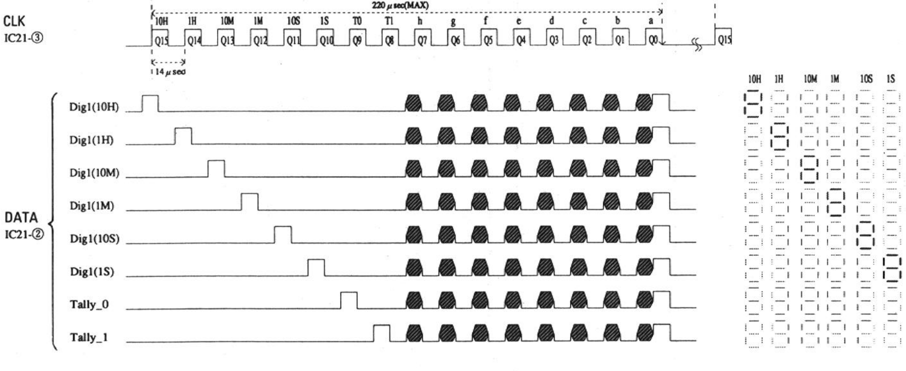

D91
D92
D93
Digit 1 Digit 2
Digit 1 Anode
Digit 2 Anode
a
b
c
d
e
f
g
h
SS STOP
D44
CASS FF
D37
D45
Z REP
D38
D46
INDEX REP
Q21
Q22
Q23
Q24
Q25
Q26
Q29
Q30
Q31
Q32
Q33
Q34
CN 22
AUDIO MONITOR
A2 M A1
SW2
AUDIO MONITOR
N H
SW3
COUNTOR
UB TC CTL
SW5
KEY IN 3
SIOH
KS1H
KS10M
KS1M
KS10S
KS1S
SEARCH DIAL

POSITION	PIN No.					TAPE SPEED			
	MENU No.337 SLOW MODE					LINEAR	LINEAR	STEP	STEP
	MENU No.340 SEARCH SPEED					×33	×17	×33	×17
	①	②	③	④	⑤				
a	ON	ON	ON	ON		−33	−17	−33	−17
b		ON	ON	ON		−11	−11	−11	−11
c			ON	ON		−5	−5	−5	−5
d	ON		ON	ON		−2	−2	−2	−2
e	ON			ON		−1	−1	−1	−1
f				ON		−1/2	−1/2	−1/6	−1/6
g		ON		ON		−1/10	−1/10	−1/18	−1/18
h	ON	ON		ON		−1/30	−1/30	−1/30	−1/30
i	ON	ON			ON	0	0	0	0
j	ON	ON				+1/30	+1/30	+1/30	+1/30
k		ON				+1/10	+1/10	+1/18	+1/18
l						−1/2	−1/2	−1/2	−1/2
m	ON					+1	+1	+1	+1
n	ON		ON			+2	+2	+2	+2
o			ON			+5	+5	+5	+5
p		ON	ON			+11	+11	+11	+11
q	ON	ON	ON			+33	+17	+33	+17

REMOTE-2 PIN FUNCTION

PIN No.	I/O	SIGNAL NAME
1	O	12V
2	O	SIO CLOCK
3	–	GND
4	I/O	SIO DATA
5	–	GND
6	I/O	CS REMOTE
7	O	SYSTEM RESET
8	O	SERVO REFERENCE (30Hz)
9	–	GND
10	I	REMOTE CONNECT (L)
11	–	GND
12	–	NOT CONNECTED

— KEY MATRIX TIMING CHART —


1msec
220 μsec(MAX)
14 μsec
CLK
IC21-③
10H
1H
10M
1M
10S
1S
T0
T1
h
g
f
e
d
c
b
a
Q15
Q14
Q13
Q12
Q11
Q10
Q9
Q8
Q7
Q6
Q5
Q4
Q3
Q2
Q1
Q0
DATA
IC21-②
Dig1(10H)
Dig1(1H)
Dig1(10M)
Dig1(1M)
Dig1(10S)
Dig1(1S)
Tally_0
Tally_1
10H
1H
10M
1M
10S
1S

6

4.12 OVERALL WIRING DIAGRAM

— DIAGRAM (1/2) —

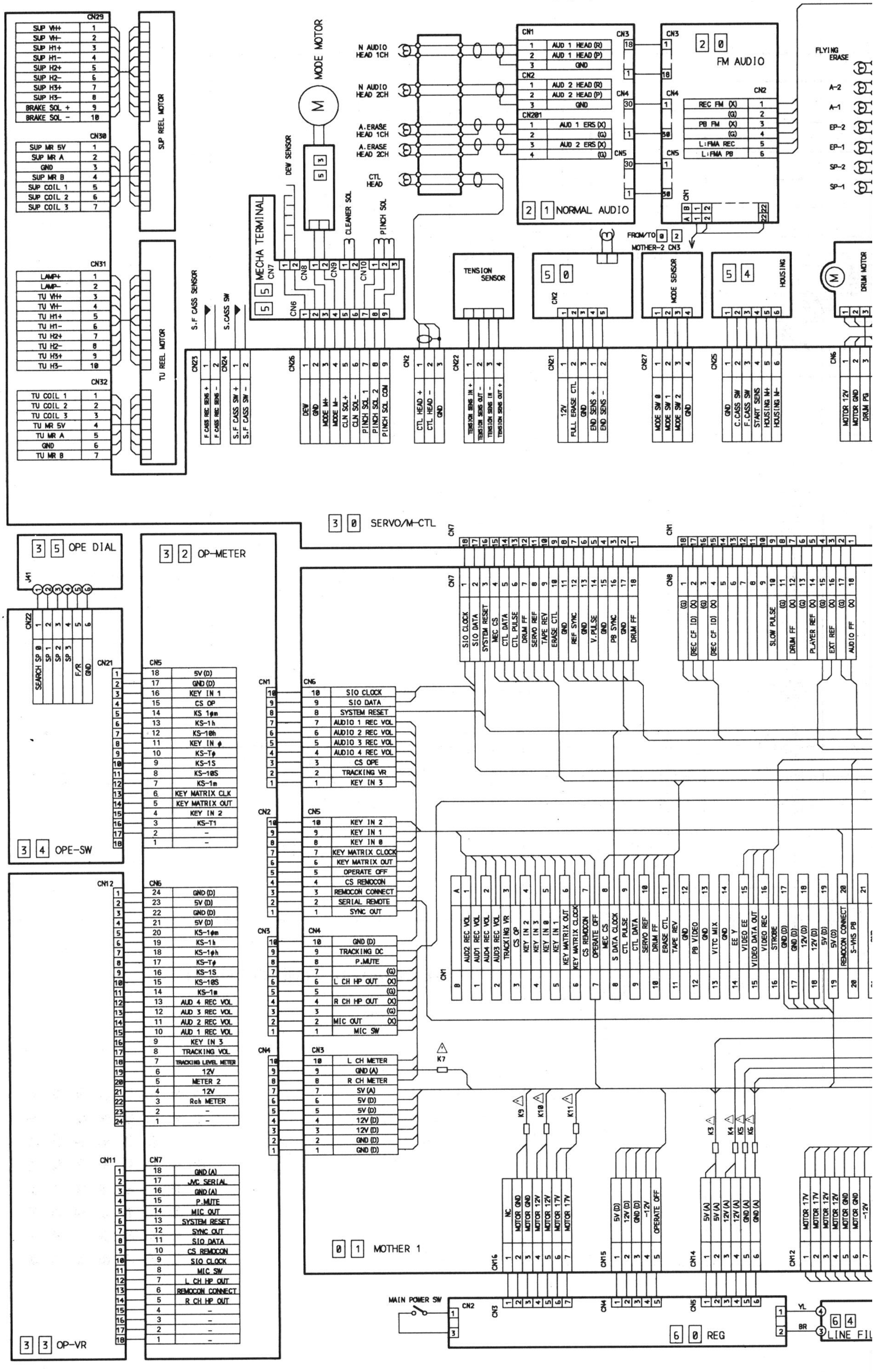
5

4

3

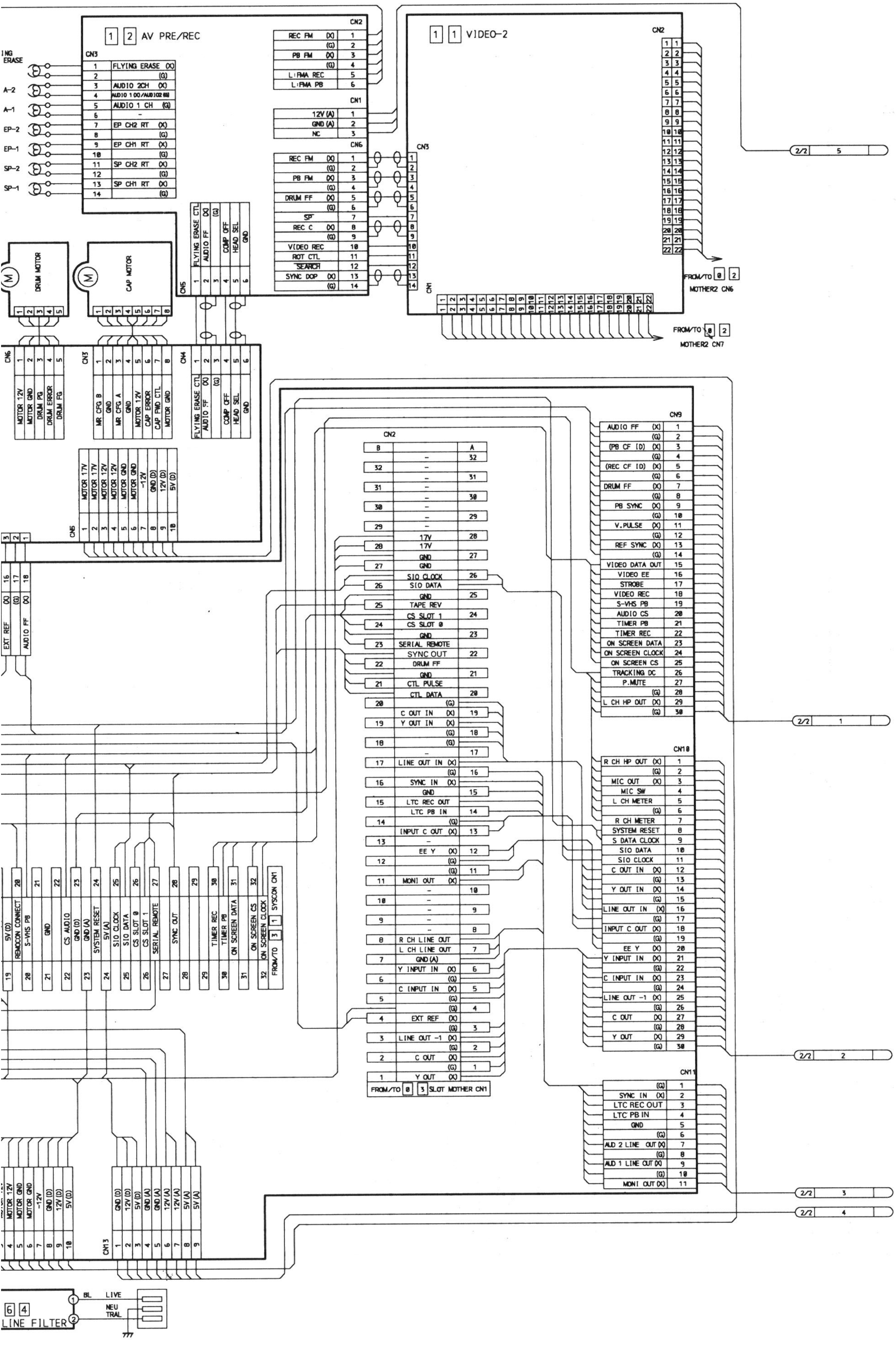
2

1

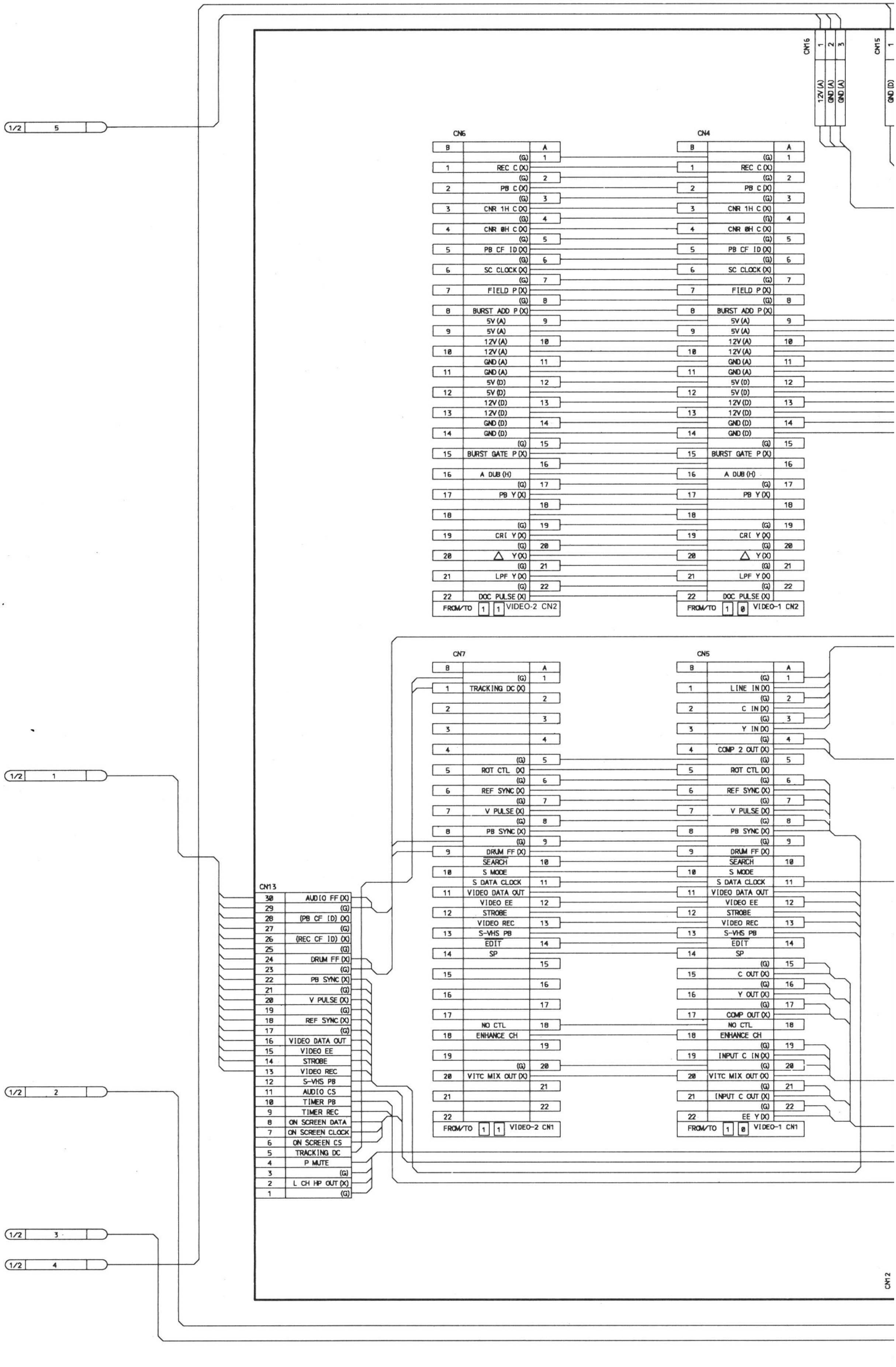


SUP REEL MOTOR
TU REEL MOTOR
MODE MOTOR
DEW SENSOR
MECHA TERMINAL
5 5
5 3
CLEANER SOL
PINCH SOL
S.F CASS SENSOR
S.CASS SW
N AUDIO HEAD 1CH
N AUDIO HEAD 2CH
A.ERASE HEAD 1CH
A.ERASE HEAD 2CH
CTL HEAD
2 1 NORMAL AUDIO
2 0 FM AUDIO
FLYING ERASE
FROM/TO 0 2 MOTHER-2 CN3
TENSION SENSOR
5 0
MODE SENSOR
5 4
HOUSING
DRUM MOTOR
3 0 SERVO/M-CTL
3 5 OPE DIAL
3 2 OP-METER
3 4 OPE-SW
3 3 OP-VR
0 1 MOTHER 1
MAIN POWER SW
6 0 REG
6 4 LINE FIL
YL
BR
K3
K4
K5
K6
K7
K9
K10
K11

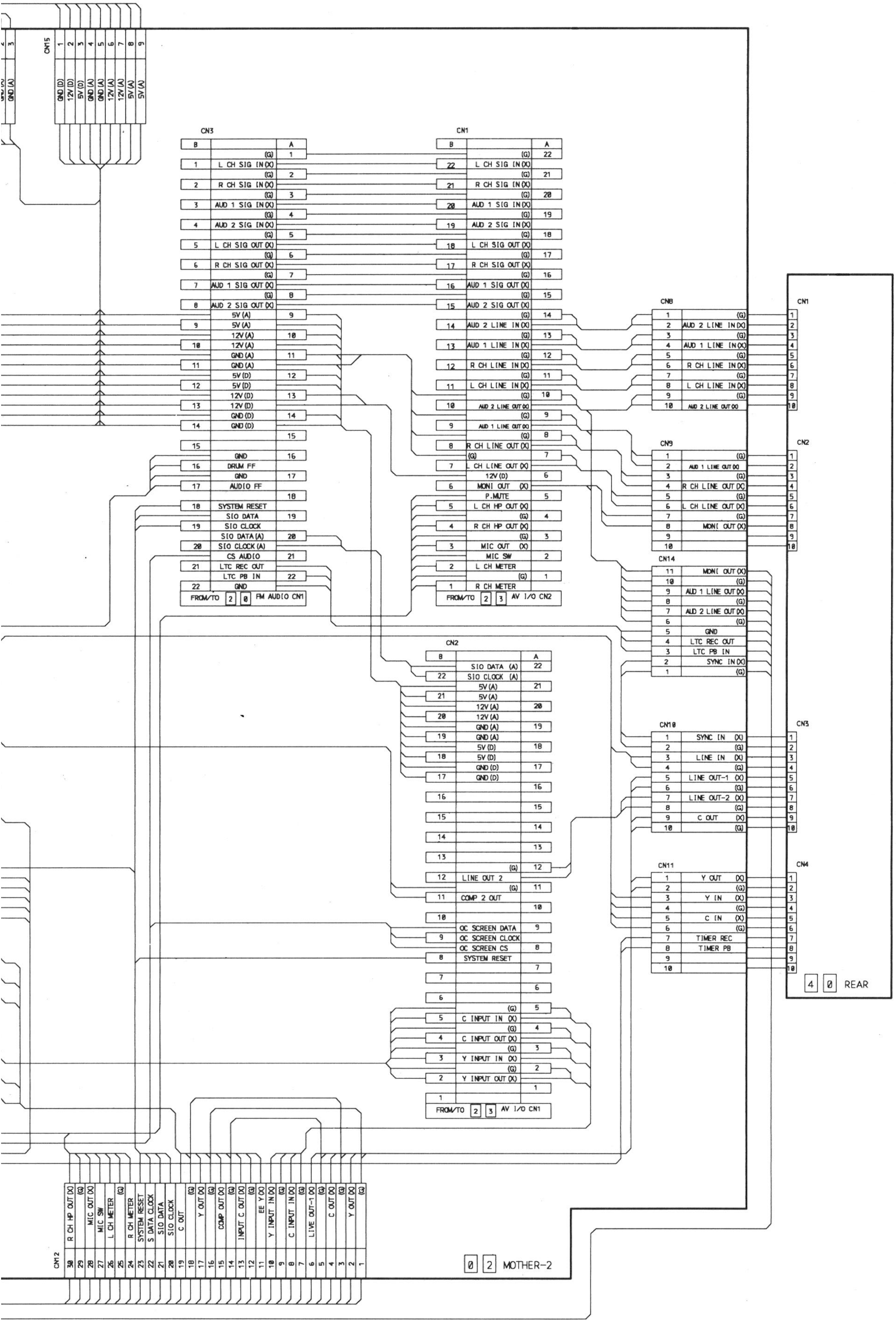
A B C


1 2 AV PRE/REC
CN2
REC FM (X) 1
(G) 2
PB FM (X) 3
(G) 4
L:FMA REC 5
L:FMA PB 6
CN1
12V (A) 1
GND (A) 2
NC 3
CN6
REC FM (X) 1
(G) 2
PB FM (X) 3
(G) 4
DRUM FF (X) 5
(G) 6
SP 7
REC C (X) 8
(G) 9
VIDEO REC 10
ROT CTL 11
SEARCH 12
SYNC DOP (X) 13
(G) 14
CN3
1 FLYING ERASE (X)
2 (G)
3 AUDIO 2CH (X)
4 AUDIO 1 (X)/AUDIO 2 (G)
5 AUDIO 1 CH (G)
6 -
7 EP CH2 RT (X)
8 (G)
9 EP CH1 RT (X)
10 (G)
11 SP CH2 RT (X)
12 (G)
13 SP CH1 RT (X)
14 (G)
ING ERASE
A-2
A-1
EP-2
EP-1
SP-2
SP-1
CN5
1 FLYING ERASE CTL
2 AUDIO FF (X)
3 (G)
4 COMP OFF
5 HEAD SEL
6 GND
M DRUM MOTOR 1 2 3 4 5
M CAP MOTOR 1 2 3 4 5 6 7 8
1 1 VIDEO-2
CN2 1–22
CN3 1–14
CN1 1–22
FROM/TO 0 2 MOTHER2 CN6
FROM/TO 0 2 MOTHER2 CN7
2/2 5
CN6
1 MOTOR 12V
2 MOTOR GND
3 DRUM PG
4 DRUM ERROR
5 DRUM FG
CN3
1 MR CFG B
2 GND
3 MR CFG A
4 GND
5 MOTOR 12V
6 CAP ERROR
7 CAP FWD CTL
8 MOTOR GND
CN4
1 FLYING ERASE CTL
2 AUDIO FF (X)
3 (G)
4 COMP OFF
5 HEAD SEL
6 GND
CN5
1 MOTOR 17V
2 MOTOR 17V
3 MOTOR 12V
4 MOTOR 12V
5 MOTOR GND
6 MOTOR GND
7 -12V
8 GND (D)
9 12V (D)
10 5V (D)
3 2 1
16 EXT REF (X)
17 (G)
18 AUDIO FF (X)
CN2
B A
32 -
32 -
31 -
31 -
30 -
30 -
29 -
29 -
28 17V
28 17V
27 GND
27 GND
26 SIO CLOCK
26 SIO DATA
25 GND
25 TAPE REV
24 CS SLOT 1
24 CS SLOT 0
23 GND
23 SERIAL REMOTE
22 SYNC OUT
22 DRUM FF
21 GND
21 CTL PULSE
20 CTL DATA
20 (G)
19 C OUT IN (X)
19 Y OUT IN (X)
18 (G)
18 (G)
17 -
17 LINE OUT IN (X)
16 (G)
16 SYNC IN (X)
15 GND
15 LTC REC OUT
14 LTC PB IN
14 (G)
13 INPUT C OUT (X)
13 -
12 EE Y (X)
12 (G)
11 (G)
11 MONI OUT (X)
10 -
10 -
9 -
9 -
8 -
8 R CH LINE OUT
7 L CH LINE OUT
7 GND (A)
6 Y INPUT (X)
6 (G)
5 C INPUT (X)
5 (G)
4 (G)
4 EXT REF (X)
3 (G)
3 LINE OUT -1 (X)
2 (G)
2 C OUT (X)
1 (G)
1 Y OUT (X)
FROM/TO 0 3 SLOT MOTHER CN1
CN9
AUDIO FF (X) 1
(G) 2
(PB CF (D) (X) 3
(G) 4
(REC CF (D) (X) 5
(G) 6
DRUM FF (X) 7
(G) 8
PB SYNC (X) 9
(G) 10
V.PULSE (X) 11
(G) 12
REF SYNC (X) 13
(G) 14
VIDEO DATA OUT 15
VIDEO EE 16
STROBE 17
VIDEO REC 18
S-VHS PB 19
AUDIO CS 20
TIMER PB 21
TIMER REC 22
ON SCREEN DATA 23
ON SCREEN CLOCK 24
ON SCREEN CS 25
TRACKING DC 26
P.MUTE 27
(G) 28
L CH HP OUT (X) 29
(G) 30
2/2 1
CN10
R CH HP OUT (X) 1
(G) 2
MIC OUT (X) 3
MIC SW 4
L CH METER 5
(G) 6
R CH METER 7
SYSTEM RESET 8
S DATA CLOCK 9
SIO DATA 10
SIO CLOCK 11
C OUT IN (X) 12
(G) 13
Y OUT IN (X) 14
(G) 15
LINE OUT IN (X) 16
(G) 17
INPUT C OUT (X) 18
(G) 19
EE Y (X) 20
Y INPUT IN (X) 21
(G) 22
C INPUT IN (X) 23
(G) 24
LINE OUT -1 (X) 25
(G) 26
C OUT (X) 27
(G) 28
Y OUT (X) 29
(G) 30
2/2 2
CN11
(G) 1
SYNC IN (X) 2
LTC REC OUT 3
LTC PB IN 4
GND 5
(G) 6
AUD 2 LINE OUT (X) 7
(G) 8
AUD 1 LINE OUT (X) 9
(G) 10
MONI OUT (X) 11
2/2 3
2/2 4
19 5V (D)
20 REMOCON CONNECT
21 S-VHS PB
22 GND
23 CS AUDIO
GND (D)
GND (A)
24 SYSTEM RESET
5V (A)
25 SIO CLOCK
SIO DATA
26 CS SLOT 0
CS SLOT 1
27 SERIAL REMOTE
28 SYNC OUT
29
30 TIMER REC
TIMER PB
31 ON SCREEN DATA
32 ON SCREEN CS
ON SCREEN CLOCK
FROM/TO 3 1 SYSCON CN1
4 MOTOR 12V
5 MOTOR GND
6 MOTOR GND
7 -12V
8 GND (D)
9 12V (D)
10 5V (D)
CN13
1 GND (D)
2 12V (D)
3 5V (D)
4 GND (A)
5 GND (A)
6 12V (A)
7 12V (A)
8 5V (A)
9 5V (A)
6 4 LINE FILTER
1 BL LIVE
2 NEU TRAL

— DIAGRAM (2/2) —

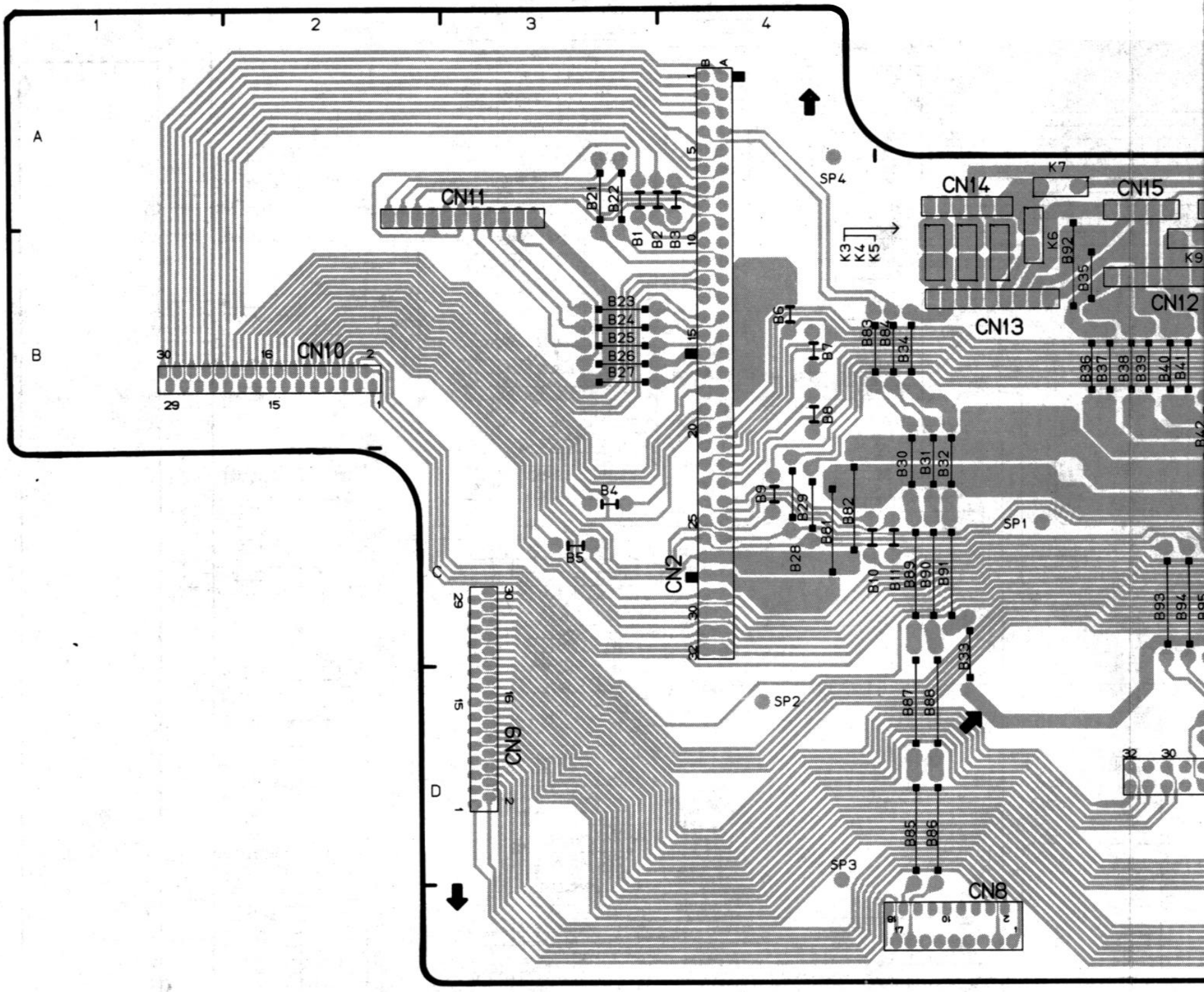

CN16
1 2 3
12V (A)
GND (A)
GND (A)
CN15
1
GND (D)
1/2 5
1/2 1
1/2 2
1/2 3
1/2 4
CN6
B
A
(G) 1
1 REC C (X)
(G) 2
2 PB C (X)
(G) 3
3 CNR 1H C (X)
(G) 4
4 CNR 0H C (X)
(G) 5
5 PB CF ID (X)
(G) 6
6 SC CLOCK (X)
(G) 7
7 FIELD P (X)
(G) 8
8 BURST ADD P (X)
5V (A) 9
9 5V (A)
12V (A) 10
10 12V (A)
GND (A) 11
11 GND (A)
5V (D) 12
12 5V (D)
12V (D) 13
13 12V (D)
GND (D) 14
14 GND (D)
(G) 15
15 BURST GATE P (X)
16
16 A DUB (H)
(G) 17
17 PB Y (X)
18
18
(G) 19
19 CRI Y (X)
(G) 20
20 △ Y (X)
(G) 21
21 LPF Y (X)
(G) 22
22 DOC PULSE (X)
FROM/TO 1 1 VIDEO-2 CN2
CN4
B
A
(G) 1
1 REC C (X)
(G) 2
2 PB C (X)
(G) 3
3 CNR 1H C (X)
(G) 4
4 CNR 0H C (X)
(G) 5
5 PB CF ID (X)
(G) 6
6 SC CLOCK (X)
(G) 7
7 FIELD P (X)
(G) 8
8 BURST ADD P (X)
5V (A) 9
9 5V (A)
12V (A) 10
10 12V (A)
GND (A) 11
11 GND (A)
5V (D) 12
12 5V (D)
12V (D) 13
13 12V (D)
GND (D) 14
14 GND (D)
(G) 15
15 BURST GATE P (X)
16
16 A DUB (H)
(G) 17
17 PB Y (X)
18
18
(G) 19
19 CRI Y (X)
(G) 20
20 △ Y (X)
(G) 21
21 LPF Y (X)
(G) 22
22 DOC PULSE (X)
FROM/TO 1 0 VIDEO-1 CN2
CN7
B
A
(G) 1
1 TRACKING DC (X)
2
2
3
3
4
4
(G) 5
5 ROT CTL (X)
(G) 6
6 REF SYNC (X)
(G) 7
7 V PULSE (X)
(G) 8
8 PB SYNC (X)
(G) 9
9 DRUM FF (X)
SEARCH 10
10 S MODE
S DATA CLOCK 11
11 VIDEO DATA OUT
VIDEO EE 12
12 STROBE
VIDEO REC 13
13 S-VHS PB
EDIT 14
14 SP
15
15
16
16
17
17
NO CTL 18
18 ENHANCE CH
19
19
(G) 20
20 VITC MIX OUT (X)
21
21
22
22
FROM/TO 1 1 VIDEO-2 CN1
CN5
B
A
(G) 1
1 LINE IN (X)
(G) 2
2 C IN (X)
(G) 3
3 Y IN (X)
(G) 4
4 COMP 2 OUT (X)
(G) 5
5 ROT CTL (X)
(G) 6
6 REF SYNC (X)
(G) 7
7 V PULSE (X)
(G) 8
8 PB SYNC (X)
(G) 9
9 DRUM FF (X)
SEARCH 10
10 S MODE
S DATA CLOCK 11
11 VIDEO DATA OUT
VIDEO EE 12
12 STROBE
VIDEO REC 13
13 S-VHS PB
EDIT 14
14 SP
(G) 15
15 C OUT (X)
(G) 16
16 Y OUT (X)
(G) 17
17 COMP OUT (X)
NO CTL 18
18 ENHANCE CH
(G) 19
19 INPUT C IN (X)
(G) 20
20 VITC MIX OUT (X)
(G) 21
21 INPUT C OUT (X)
(G) 22
22 EE Y (X)
FROM/TO 1 0 VIDEO-1 CN1
CN13
30 AUDIO FF (X)
29 (G)
28 (PB CF ID) (X)
27 (G)
26 (REC CF ID) (X)
25 (G)
24 DRUM FF (X)
23 (G)
22 PB SYNC (X)
21 (G)
20 V PULSE (X)
19 (G)
18 REF SYNC (X)
17 (G)
16 VIDEO DATA OUT
15 VIDEO EE
14 STROBE
13 VIDEO REC
12 S-VHS PB
11 AUDIO CS
10 TIMER PB
9 TIMER REC
8 ON SCREEN DATA
7 ON SCREEN CLOCK
6 ON SCREEN CS
5 TRACKING DC
4 P MUTE
3 (G)
2 L CH HP OUT (X)
1 (G)
CN12

A
B
C


CN15
GND (D)
12V (D)
5V (D)
GND (A)
GND (A)
12V (A)
12V (A)
5V (A)
5V (A)
CN3
L CH SIG IN (X)
R CH SIG IN (X)
AUD 1 SIG IN (X)
AUD 2 SIG IN (X)
L CH SIG OUT (X)
R CH SIG OUT (X)
AUD 1 SIG OUT (X)
AUD 2 SIG OUT (X)
DRUM FF
AUDIO FF
SYSTEM RESET
SIO DATA
SIO CLOCK
SIO DATA (A)
SIO CLOCK (A)
CS AUDIO
LTC REC OUT
LTC PB IN
GND
FROM/TO 2 0 FM AUDIO CN1
CN1
AUD 2 LINE IN (X)
AUD 1 LINE IN (X)
R CH LINE IN (X)
L CH LINE IN (X)
AUD 2 LINE OUT (X)
AUD 1 LINE OUT (X)
R CH LINE OUT (X)
L CH LINE OUT (X)
12V (D)
MONI OUT (X)
P.MUTE
L CH HP OUT (X)
R CH HP OUT (X)
MIC OUT (X)
MIC SW
L CH METER
R CH METER
FROM/TO 2 3 AV I/O CN2
CN2
SIO DATA (A)
SIO CLOCK (A)
LINE OUT 2
COMP 2 OUT
OC SCREEN DATA
OC SCREEN CLOCK
OC SCREEN CS
SYSTEM RESET
C INPUT IN (X)
C INPUT OUT (X)
Y INPUT IN (X)
Y INPUT OUT (X)
FROM/TO 2 3 AV I/O CN1
CN8
CN9
CN14
MONI OUT (X)
LTC REC OUT
LTC PB IN
SYNC IN (X)
CN10
SYNC IN (X)
LINE IN (X)
LINE OUT-1 (X)
LINE OUT-2 (X)
C OUT (X)
CN11
Y OUT (X)
Y IN (X)
C IN (X)
TIMER REC
TIMER PB
CN12
R CH HP OUT (X)
MIC OUT (X)
MIC SW
L CH METER
R CH METER
SYSTEM RESET
S DATA CLOCK
SIO DATA
SIO CLOCK
C OUT
Y OUT (X)
COMP OUT (X)
INPUT C OUT (X)
EE Y (X)
Y INPUT IN (X)
C INPUT IN (X)
LIVE OUT-1 (X)
C OUT (X)
Y OUT (X)
0 2 MOTHER-2
CN1
CN2
CN3
CN4
4 0 REAR

4.13 MOTHER-1 CIRCUIT BOARD

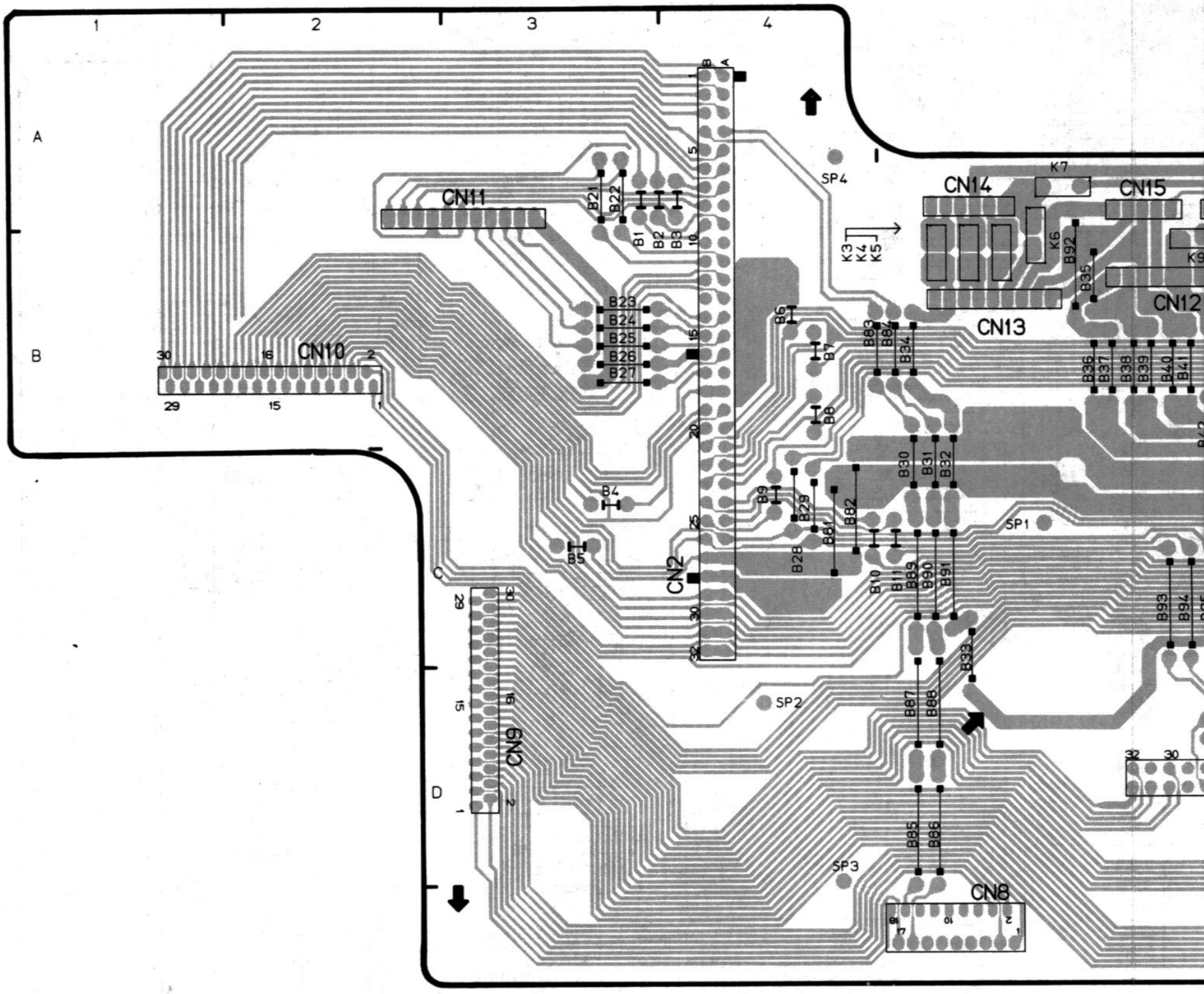
— SOLDER Side


1
2
3
4
A
B
C
D
CN11
CN10
30
16
2
29
15
1
B21
B22
B1
B2
B3
B23
B24
B25
B26
B27
B4
B5
CN2
5
10
15
20
25
30
32
B
A
SP4
K3
K4
K5
CN14
K7
CN15
K6
B92
B35
K9
CN12
CN13
B6
B7
B8
B83
B84
B34
B36
B37
B38
B39
B40
B41
B42
B30
B31
B32
B9
B29
B61
B82
B28
SP1
B10
B11
B89
B90
B91
B93
B94
CN9
29
30
15
16
1
2
SP2
B33
B87
B88
B85
B86
SP3
CN8
18
17
10
2
1
32
30

6
5
4
3
2
1
A
B
C

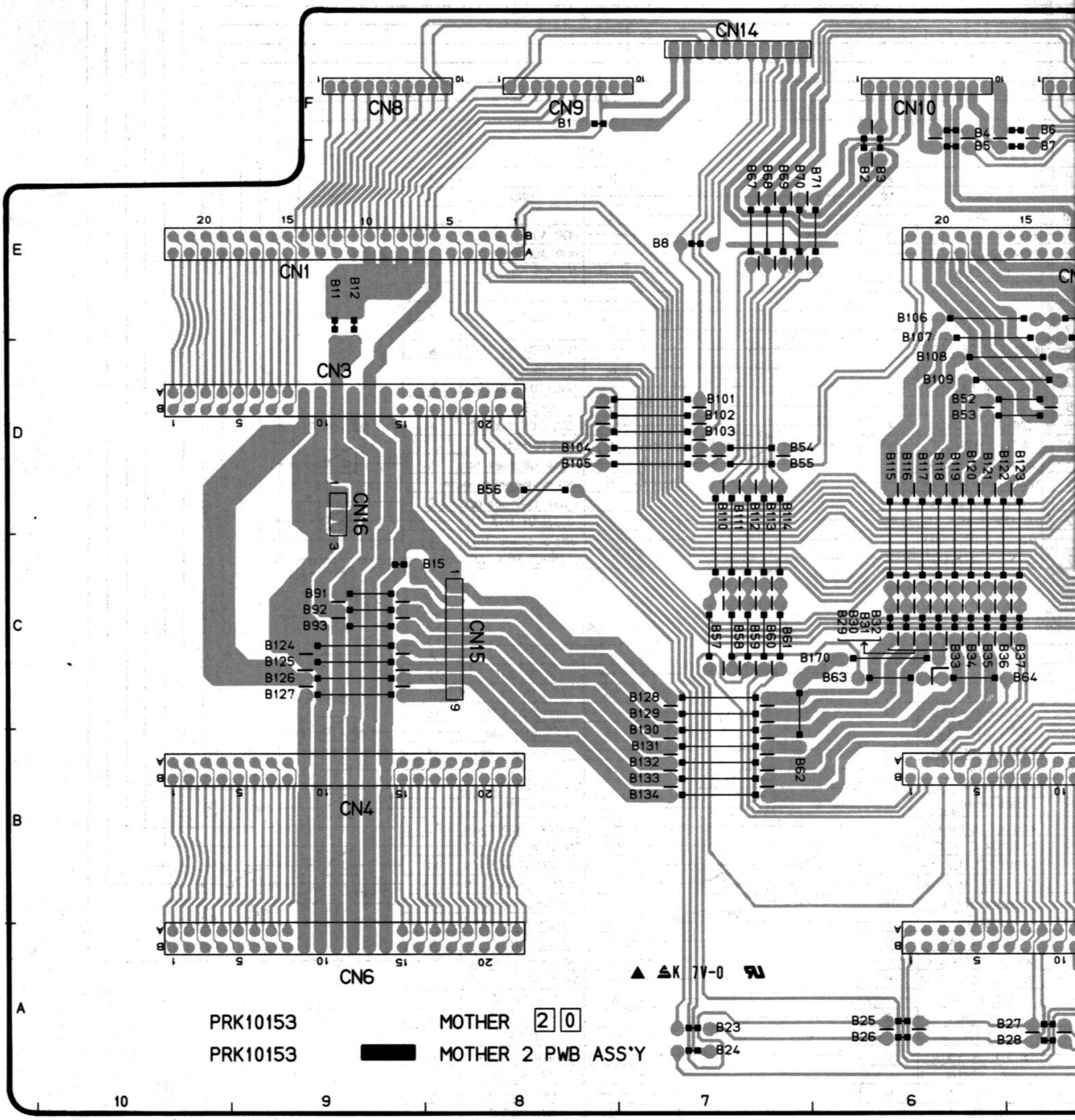
4.13 MOTHER-1 CIRCUIT BOARD

— SOLDER Side

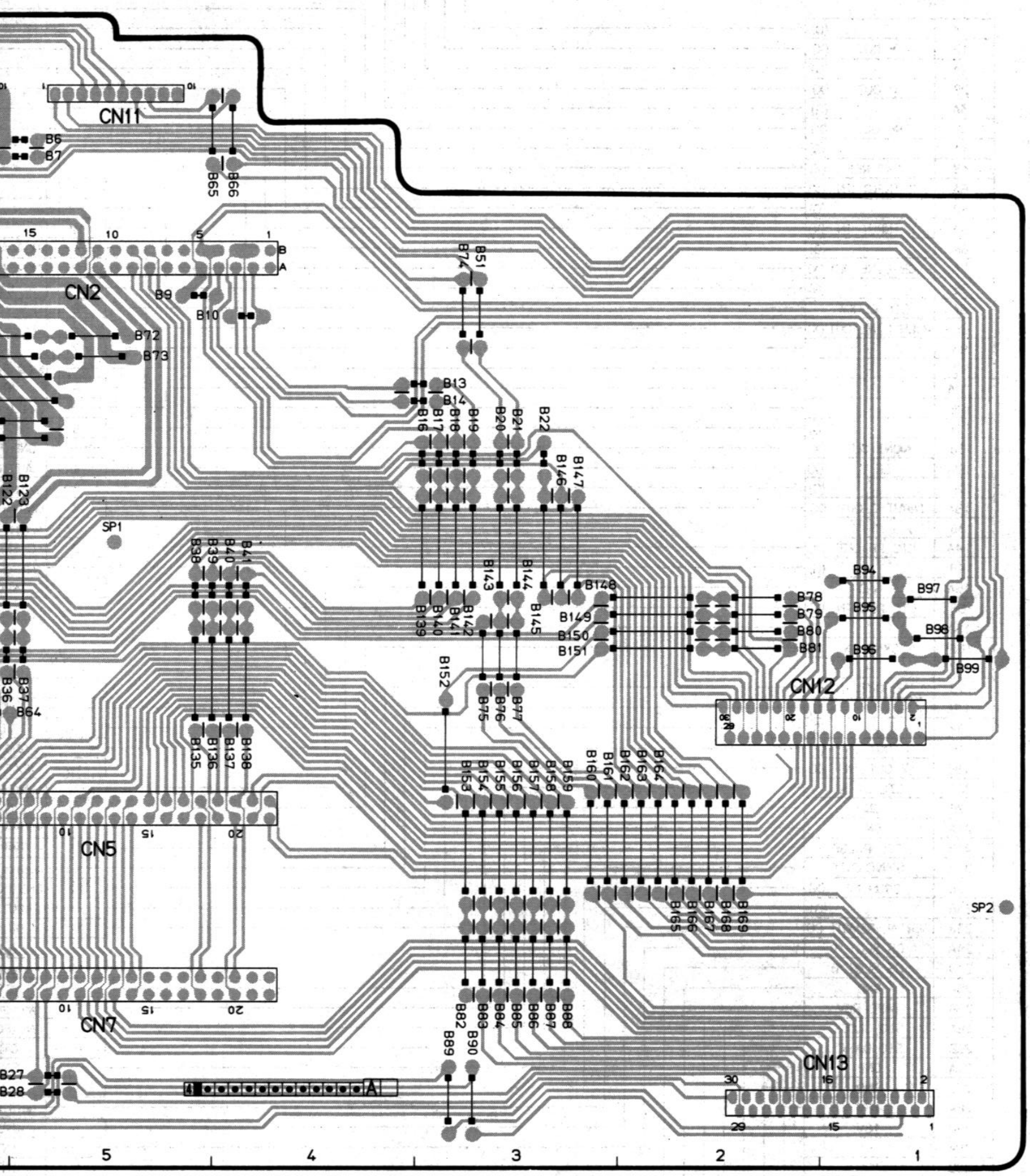

1
2
3
4
A
B
C
D
CN2
CN8
CN9
CN10
CN11
CN12
CN13
CN14
CN15
K3
K4
K5
K6
K7
K9
SP1
SP2
SP3
SP4
B1
B2
B3
B4
B5
B6
B7
B8
B9
B10
B11
B21
B22
B23
B24
B25
B26
B27
B28
B29
B30
B31
B32
B33
B34
B35
B36
B37
B38
B39
B40
B61
B82
B83
B84
B85
B86
B87
B88
B89
B90
B91
B92
B93
B94
30
16
2
29
15
1
5
10
15
20
25
30
32
B
A
18
17
10
2

4.14 MOTHER-2 CIRCUIT BOARD

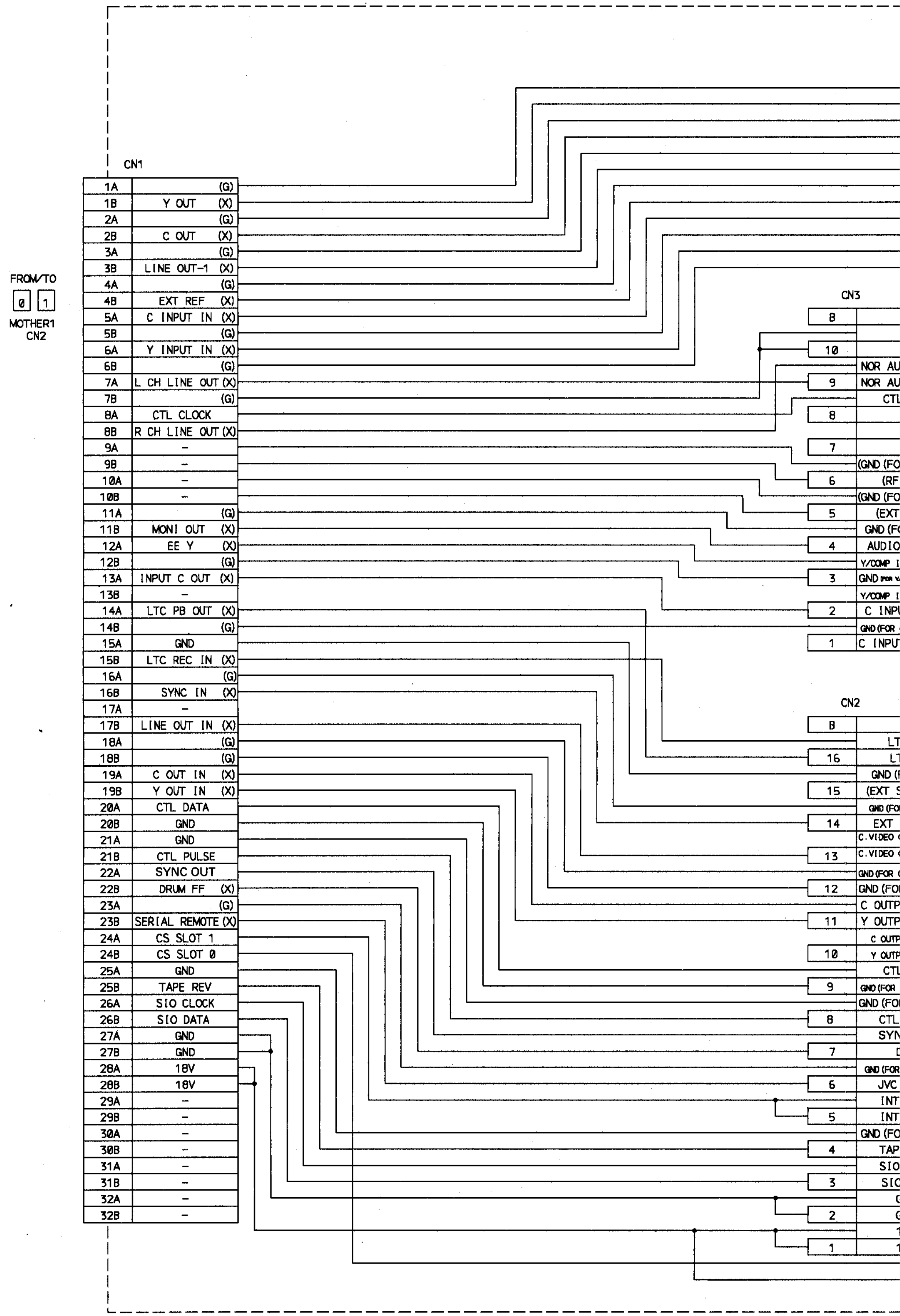
— SOLDER S


CN14
CN8
CN9
CN10
CN1
CN3
CN16
CN15
CN4
CN6
B1
B2
B3
B4
B5
B6
B7
B8
B11
B12
B15
B23
B24
B25
B26
B27
B28
B29
B30
B31
B32
B33
B34
B35
B36
B37
B52
B53
B54
B55
B56
B57
B58
B59
B60
B61
B62
B63
B64
B67
B68
B69
B70
B71
B91
B92
B93
B101
B102
B103
B104
B105
B106
B107
B108
B109
B110
B111
B112
B113
B114
B115
B116
B117
B118
B119
B120
B121
B122
B123
B124
B125
B126
B127
B128
B129
B130
B131
B132
B133
B134
B170
F
E
D
C
B
A
10
9
8
7
6
▲ ≙K 7V-0
PRK10153 MOTHER 2 0
PRK10153 MOTHER 2 PWB ASS'Y

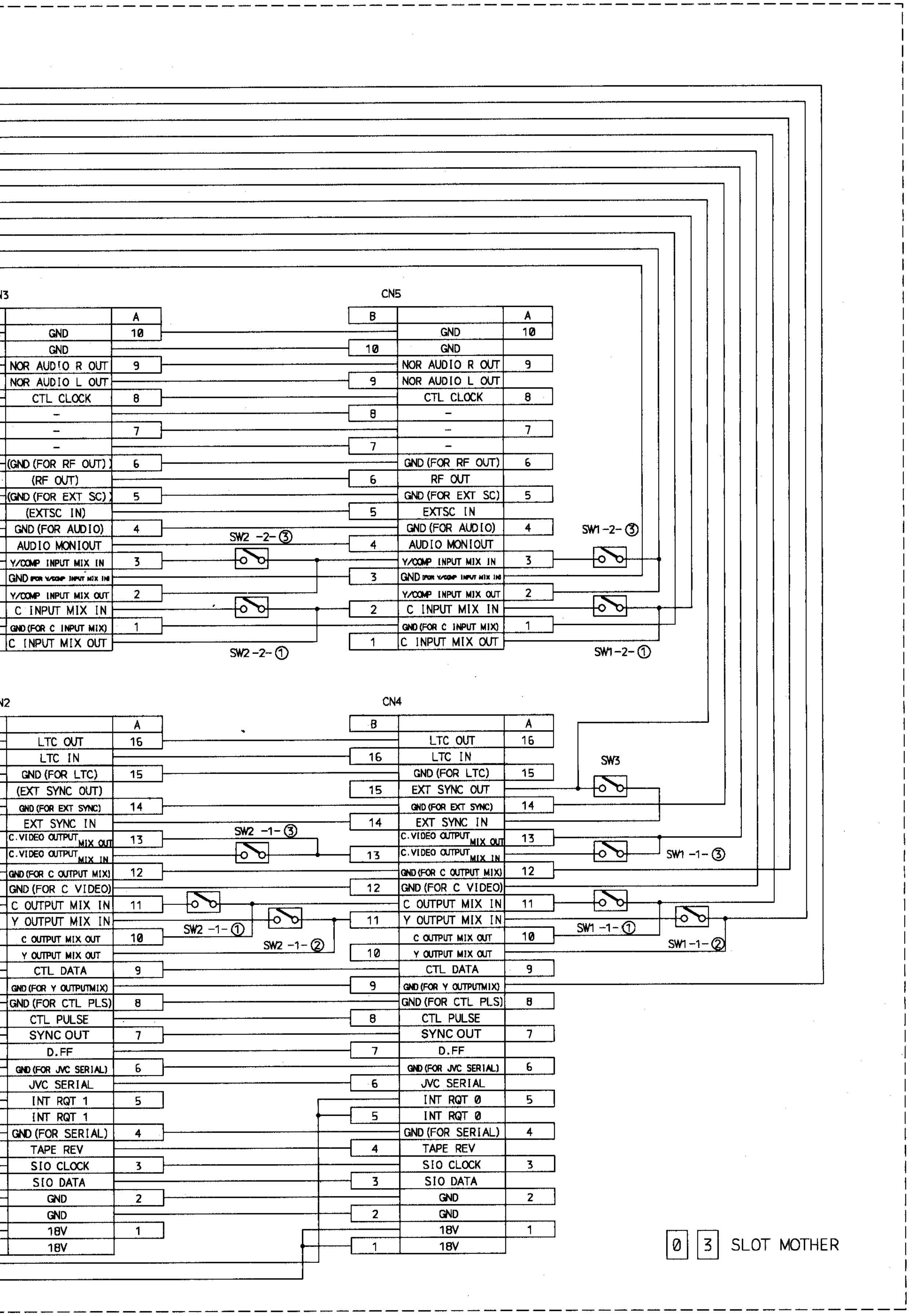
OLDER Side —


CN11
CN2
CN5
CN7
CN12
CN13
SP1
SP2
B6
B7
B9
B10
B13
B14
B16
B17
B18
B19
B20
B21
B22
B27
B28
B36
B37
B38
B39
B40
B41
B51
B64
B65
B66
B72
B73
B74
B75
B76
B77
B78
B79
B80
B81
B82
B83
B84
B85
B86
B87
B88
B89
B90
B94
B95
B96
B97
B98
B99
B122
B123
B135
B136
B137
B138
B139
B140
B141
B142
B143
B144
B145
B146
B147
B148
B149
B150
B151
B152
B153
B154
B155
B156
B157
B158
B159
B160
B161
B162
B163
B164
B165
B166
B167
B168
B169
A
B
5
4
3
2
1

4.15 SLOT MOTHER SCHEMATIC DIAGRAM



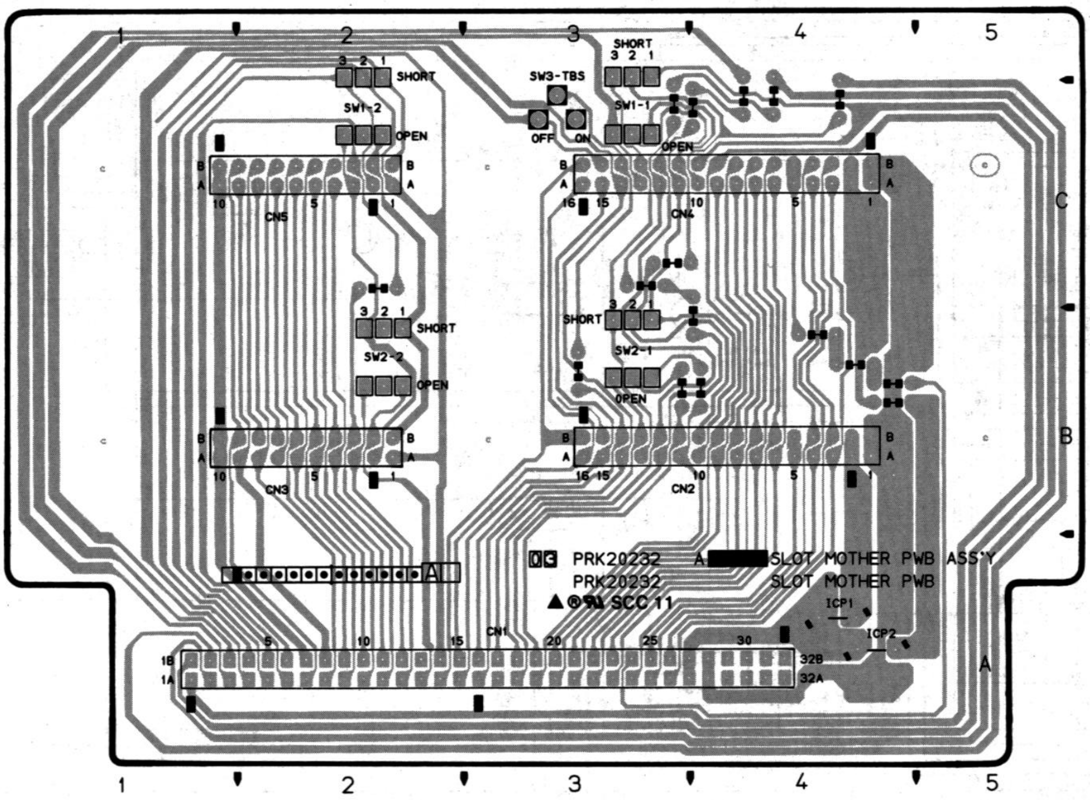
CN1
FROM/TO
0 1
MOTHER1 CN2
1A (G)
1B Y OUT (X)
2A (G)
2B C OUT (X)
3A (G)
3B LINE OUT-1 (X)
4A (G)
4B EXT REF (X)
5A C INPUT IN (X)
5B (G)
6A Y INPUT IN (X)
6B (G)
7A L CH LINE OUT (X)
7B (G)
8A CTL CLOCK
8B R CH LINE OUT (X)
9A –
9B –
10A –
10B –
11A (G)
11B MONI OUT (X)
12A EE Y (X)
12B (G)
13A INPUT C OUT (X)
13B –
14A LTC PB OUT (X)
14B (G)
15A GND
15B LTC REC IN (X)
16A (G)
16B SYNC IN (X)
17A –
17B LINE OUT IN (X)
18A (G)
18B (G)
19A C OUT IN (X)
19B Y OUT IN (X)
20A CTL DATA
20B GND
21A GND
21B CTL PULSE
22A SYNC OUT
22B DRUM FF (X)
23A (G)
23B SERIAL REMOTE (X)
24A CS SLOT 1
24B CS SLOT 0
25A GND
25B TAPE REV
26A SIO CLOCK
26B SIO DATA
27A GND
27B GND
28A 18V
28B 18V
29A –
29B –
30A –
30B –
31A –
31B –
32A –
32B –
CN3
B
10
9
8
7
6
5
4
3
2
1
CN2
B
16
15
14
13
12
11
10
9
8
7
6
5
4
3
2
1


N3
A
GND
10
GND
NOR AUDIO R OUT
9
NOR AUDIO L OUT
CTL CLOCK
8
–
7
–
(GND (FOR RF OUT))
6
(RF OUT)
(GND (FOR EXT SC))
5
(EXTSC IN)
GND (FOR AUDIO)
4
AUDIO MONIOUT
Y/COMP INPUT MIX IN
3
GND FOR Y/COMP INPUT MIX IN
Y/COMP INPUT MIX OUT
2
C INPUT MIX IN
GND (FOR C INPUT MIX)
1
C INPUT MIX OUT
SW2 -2- ③
SW2 -2- ①
CN5
B
A
GND
10
10
GND
NOR AUDIO R OUT
9
9
NOR AUDIO L OUT
CTL CLOCK
8
8
–
–
7
7
–
GND (FOR RF OUT)
6
6
RF OUT
GND (FOR EXT SC)
5
5
EXTSC IN
GND (FOR AUDIO)
4
4
AUDIO MONIOUT
Y/COMP INPUT MIX IN
3
3
GND FOR Y/COMP INPUT MIX IN
Y/COMP INPUT MIX OUT
2
2
C INPUT MIX IN
GND (FOR C INPUT MIX)
1
1
C INPUT MIX OUT
SW1 -2- ③
SW1 -2- ①
N2
A
LTC OUT
16
LTC IN
GND (FOR LTC)
15
(EXT SYNC OUT)
GND (FOR EXT SYNC)
14
EXT SYNC IN
C.VIDEO OUTPUT MIX OUT
13
C.VIDEO OUTPUT MIX IN
GND (FOR C OUTPUT MIX)
12
GND (FOR C VIDEO)
C OUTPUT MIX IN
11
Y OUTPUT MIX IN
C OUTPUT MIX OUT
10
Y OUTPUT MIX OUT
CTL DATA
9
GND (FOR Y OUTPUTMIX)
GND (FOR CTL PLS)
8
CTL PULSE
SYNC OUT
7
D.FF
GND (FOR JVC SERIAL)
6
JVC SERIAL
INT RQT 1
5
INT RQT 1
GND (FOR SERIAL)
4
TAPE REV
SIO CLOCK
3
SIO DATA
GND
2
GND
18V
1
18V
SW2 -1- ③
SW2 -1- ①
SW2 -1- ②
CN4
B
A
LTC OUT
16
16
LTC IN
GND (FOR LTC)
15
15
EXT SYNC OUT
GND (FOR EXT SYNC)
14
14
EXT SYNC IN
C.VIDEO OUTPUT MIX OUT
13
13
C.VIDEO OUTPUT MIX IN
GND (FOR C OUTPUT MIX)
12
12
GND (FOR C VIDEO)
C OUTPUT MIX IN
11
11
Y OUTPUT MIX IN
C OUTPUT MIX OUT
10
10
Y OUTPUT MIX OUT
CTL DATA
9
9
GND (FOR Y OUTPUTMIX)
GND (FOR CTL PLS)
8
8
CTL PULSE
SYNC OUT
7
7
D.FF
GND (FOR JVC SERIAL)
6
6
JVC SERIAL
INT RQT 0
5
5
INT RQT 0
GND (FOR SERIAL)
4
4
TAPE REV
SIO CLOCK
3
3
SIO DATA
GND
2
2
GND
18V
1
1
18V
SW3
SW1 -1- ③
SW1 -1- ①
SW1 -1- ②

0 3 SLOT MOTHER

4.16 SLOT MOTHER CIRCUIT BOARD

— SOLDER Side —

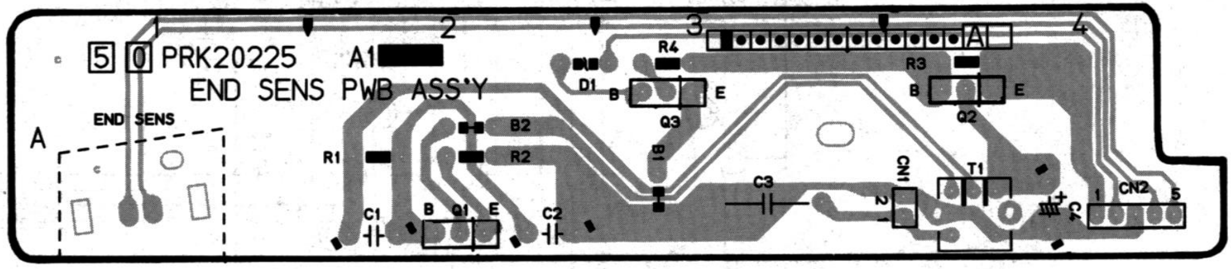


1
2
3
4
5
A
B
C
SHORT
OPEN
SW1-2
SW1-1
SW2-2
SW2-1
SW3-TBS
OFF
ON
CN5
CN4
CN3
CN2
CN1
ICP1
ICP2
1B
1A
32B
32A
03 PRK20232 A SLOT MOTHER PWB ASS'Y
PRK20232 SLOT MOTHER PWB
SCC 11

4.17 END SENSOR CIRCUIT BOARD

— SOLDER Side —

— SOLDER Side —



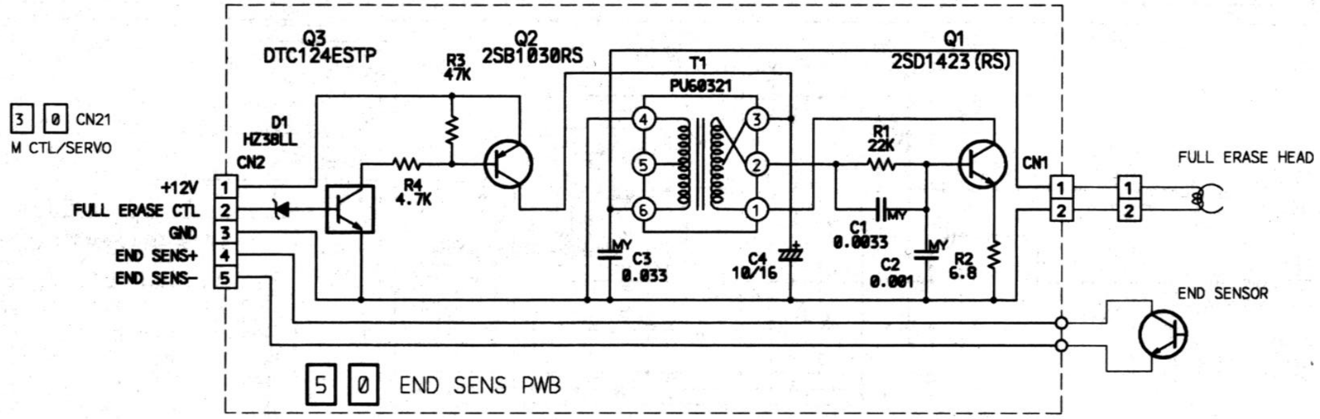
1
2
3
4
A
5 0 PRK20225 A1
END SENS PWB ASS'Y
END SENS
D1
R4
R3
R1
R2
B2
B1
Q1
Q2
Q3
B
E
C1
C2
C3
C4
CN1
CN2
T1

(PRK20225-01-03)

4.18

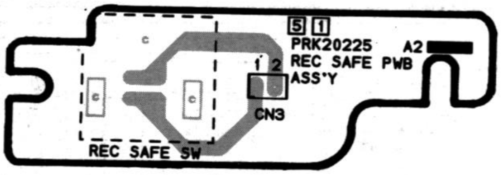
4.19

4.18 END SENSOR SCHEMATIC DIAGRAM


3 0 CN21
M CTL/SERVO
CN2
+12V
FULL ERASE CTL
GND
END SENS+
END SENS–
1
2
3
4
5
D1
HZ3BLL
Q3
DTC124ESTP
R3
47K
Q2
2SB1030RS
R4
4.7K
T1
PU60321
Q1
2SD1423 (RS)
R1
22K
C1
0.0033
MY
C2
0.001
MY
R2
6.8
C3
0.033
MY
C4
10/16
CN1
1
2
FULL ERASE HEAD
END SENSOR
5 0 END SENS PWB

.19 REC SAFE SW, S-SWITCH, MODE MOTOR, M-TERMINAL, A/C HEAD, C. HOUSING CIRCUIT BOARD

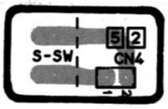
— REC SAFE SW —


5 1
PRK20225
REC SAFE PWB
ASS'Y
A2
1 2
CN3
REC SAFE SW

(PRK20225-01-03)

— SOLDER Side —

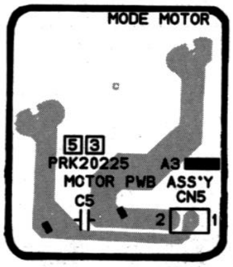
— S. SWITCH —



(PRK20225-01-03)

— SOLDER Side —

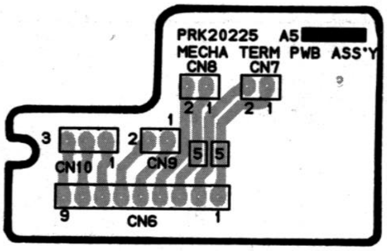
— MODE MOTOR —


MODE MOTOR
5 3
PRK20225
A3
MOTOR PWB ASS'Y
C5
CN5
2
1

(PRK20225-01-03)

— SOLDER Side —

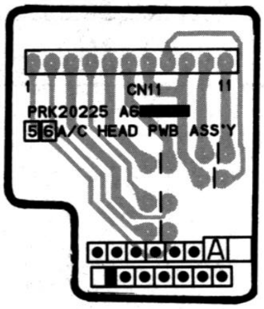
— M-TERMINAL —


PRK20225
A5
MECHA TERM PWB ASS'Y
CN8
CN7
2 1
2 1
1
3
2
CN10
1
CN9
5
5
9
CN6
1

(PRK20225-01-03)

— SOLDER Side —

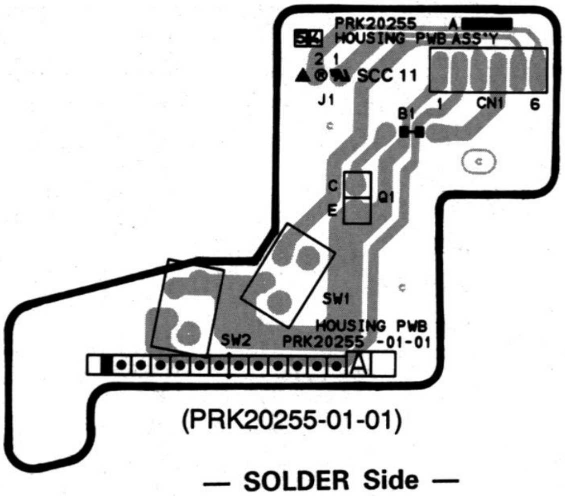
— A/C HEAD —


1
CN11
11
PRK20225 A6
5 6 A/C HEAD PWB ASS'Y
A

(PRK20225-01-03)

— SOLDER Side —

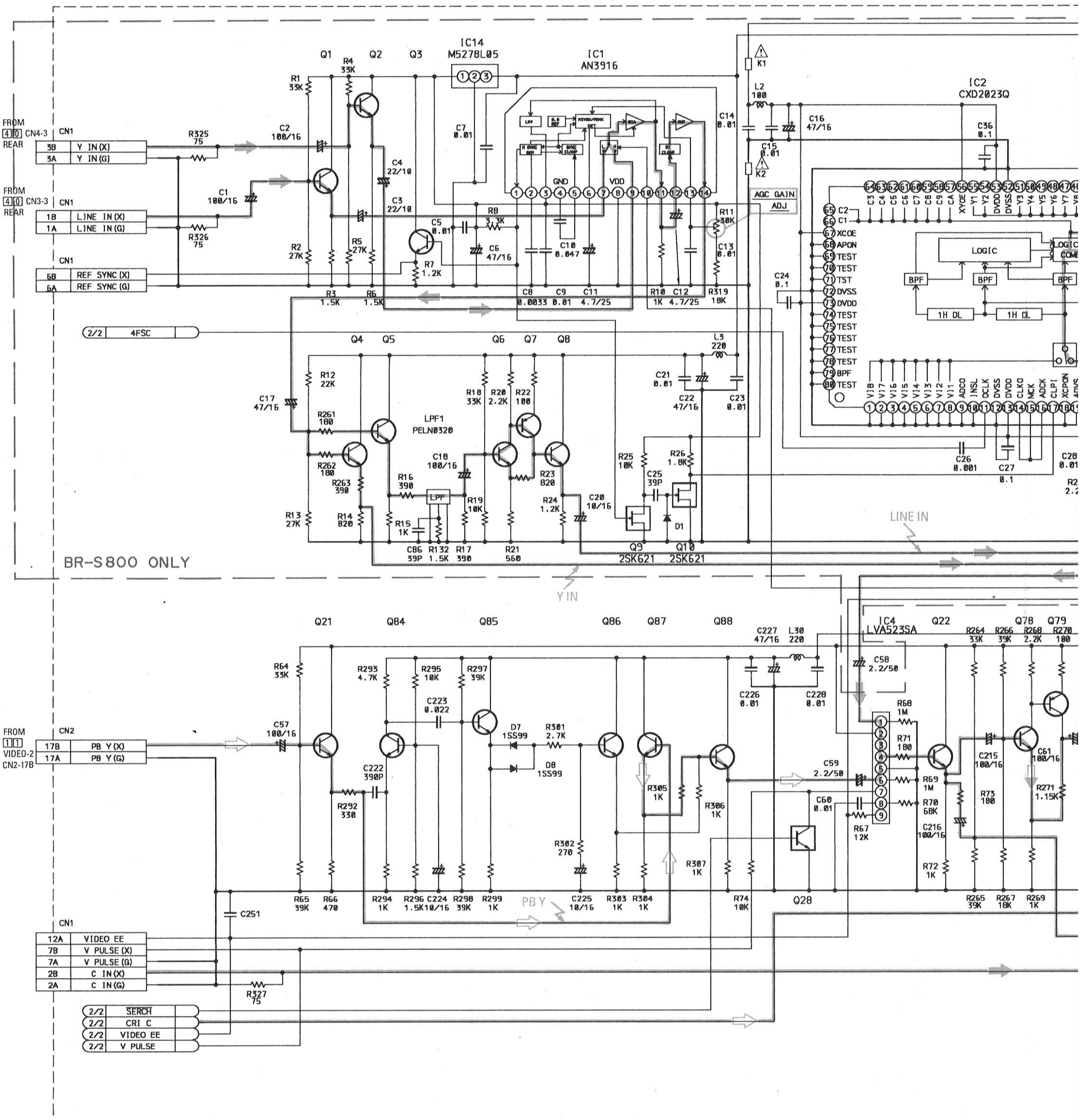
— C. HOUSING —


PRK20255
A
5 4 HOUSING PWB ASS'Y
2 1
SCC 11
J1
1
CN1
6
B1
C
E
Q1
SW1
SW2
HOUSING PWB
PRK20255 -01-01
A

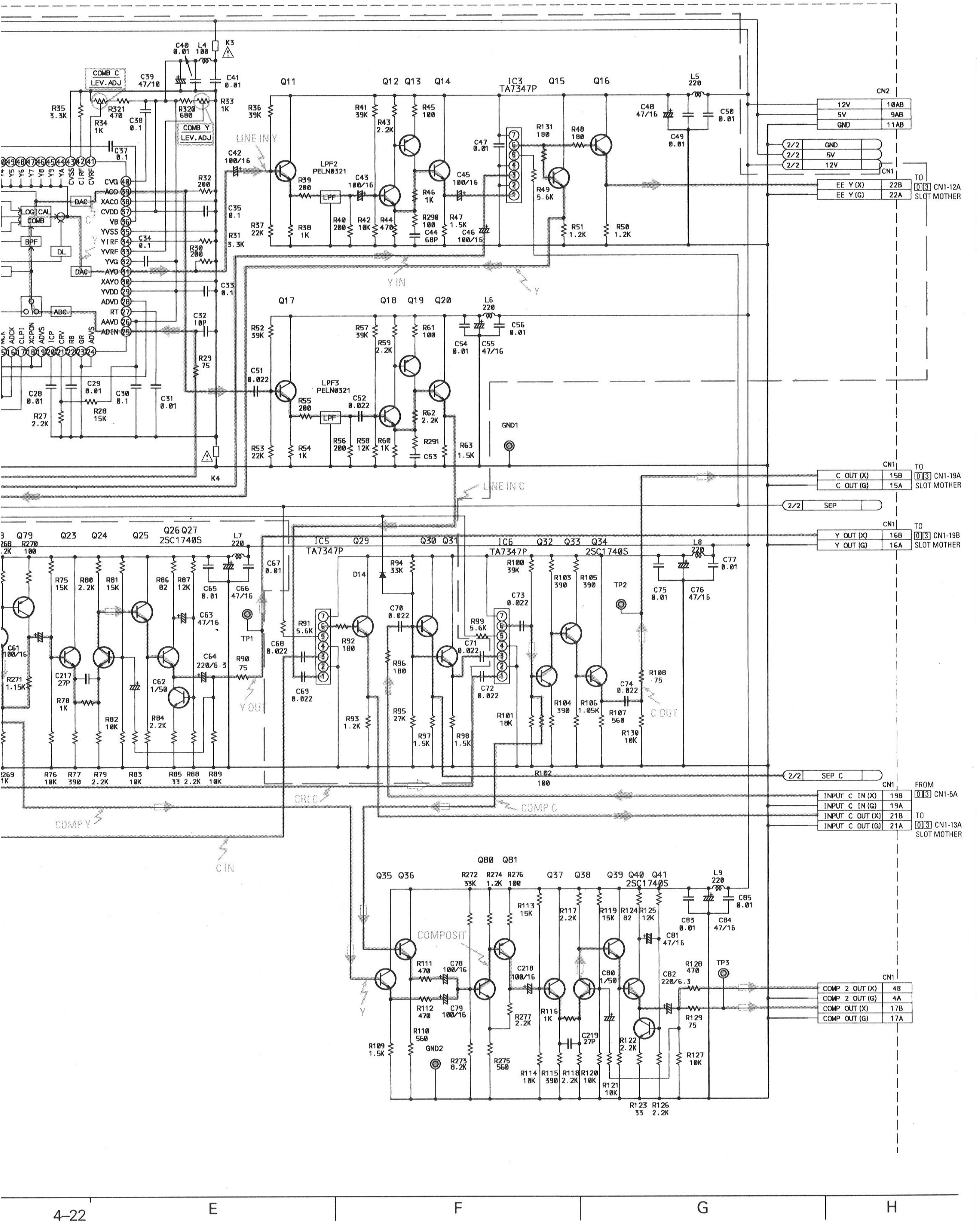
(PRK20255-01-01)

— SOLDER Side —

4.20 VIDEO-1 SCHEMATIC DIAGRAM
— DIAGRAM (1/2) —


BR-S800 ONLY
FROM 40 CN4-3 REAR
CN1
3B Y IN(X)
3A Y IN(G)
FROM 40 CN3-3 REAR
1B LINE IN(X)
1A LINE IN(G)
6B REF SYNC(X)
6A REF SYNC(G)
2/2 4FSC
Q1
Q2
Q3
IC14 M5278L05
IC1 AN3916
IC2 CXD2023Q
AGC GAIN ADJ
R325 75
R326 75
C2 100/16
C1 100/16
R1 33K
R4 33K
C4 22/10
C3 22/10
C5 0.01
R8 3.3K
C6 47/16
C7 0.01
C8 0.0033
C9 0.01
C10 0.047
C11 4.7/25
R10 1K
C12 4.7/25
R319 18K
R11 30K
C13 0.01
C14 0.01
C15 0.01
C16 47/16
C36 0.1
L2 100
K1
K2
GND
VDD
LOGIC
BPF
1H DL
C24 0.1
C26 0.001
C27 0.1
C28 0.01
Q4
Q5
Q6
Q7
Q8
LPF1 PELN0320
L3 220
C21 0.01
C22 47/16
C23 0.01
C17 47/16
R12 22K
R261 180
R262 180
R263 390
R13 27K
R14 820
R16 390
R15 1K
C86 39P
R132 1.5K
R17 390
C18 100/16
R18 33K
R20 2.2K
R22 100
R19 10K
R21 560
R23 820
R24 1.2K
C20 10/16
R25 10K
R26 1.8K
C25 39P
D1
Q9 2SK621
Q10 2SK621
Y IN
LINE IN
Q21
Q84
Q85
Q86
Q87
Q88
IC4 LVA523SA
Q22
Q78
Q79
Q28
FROM 11 VIDEO-2 CN2-17B
CN2
17B PB Y(X)
17A PB Y(G)
C57 100/16
R64 33K
R293 4.7K
R295 10K
R297 39K
C223 0.022
C222 390P
R292 330
D7 1SS99
D8 1SS99
R301 2.7K
R302 270
R305 1K
R306 1K
R307 1K
C227 47/16
L30 220
C226 0.01
C228 0.01
C58 2.2/50
C59 2.2/50
C60 0.01
R67 12K
R68 1M
R71 180
R69 1M
R70 68K
R72 1K
R73 180
C215 100/16
C216 100/16
C61 100/16
R271 1.15K
R264 33K
R266 39K
R268 2.2K
R270 100
R65 39K
R66 470
R294 1K
R296 1.5K
C224 10/16
R298 39K
R299 1K
PB Y
C225 10/16
R303 1K
R304 1K
R74 10K
R265 39K
R267 18K
R269 1K
C251
CN1
12A VIDEO EE
7B V PULSE(X)
7A V PULSE(G)
2B C IN(X)
2A C IN(G)
R327 75
2/2 SERCH
2/2 CRI C
2/2 VIDEO EE
2/2 V PULSE
A
B
C
1
2
3
4
5
6

NOTE:UNLESS OTHERWISE SPECIFIED:
ALL NPN TRANSISTORS ARE 2SC2412K
ALL PNP TRANSISTORS ARE 2SA1037K
ALL NPN DIGITAL TRANSISTORS ARE DTC144EKT
ALL PNP DIGITAL TRANSISTORS ARE DTA144EKT
ALL DIODES ARE DAN202K
ALL RESISTANCE VALUES ARE IN OHMS.(1/10W)
ALL INDUCTANCE VALUES ARE IN μH.
ALL CAPACITANCE VALUES ARE IN uF.
ELECTROLYTIC
CERAMIC


COMB C LEV.ADJ
COMB Y LEV.ADJ
C40 0.01
L4 100
K3
C39 47/10
C41 0.01
R35 3.3K
R321 470
R34 1K
C38 0.1
R320 680
R33 1K
C37 0.1
CVG 40
ACO 39
XACO 38
CVDD 37
VB 36
YVSS 35
YIRF 34
YVRF 33
YVG 32
AYO 31
XAYO 30
YVDD 29
ADVD 28
RT 27
AAVD 26
ADIN 25
CVSS
CIRF
CVRF
LOGICAL COMB
BPF
DL
DAC
ADC
R32 200
C35 0.1
R31 3.3K
C34 0.1
R30 200
C33 0.1
C32 10P
R29 75
C29 0.01
C28 0.01
C30 0.1
C31 0.01
R28 15K
R27 2.2K
K4
LINE IN Y
C42 100/16
Q11
Q12 Q13 Q14
IC3 TA7347P
Q15
Q16
R36 39K
R39 200
LPF2 PELN0321
LPF
C43 100/16
R41 39K
R43 2.2K
R45 100
R46 1K
C45 100/16
C47 0.01
R131 180
R48 180
R49 5.6K
R37 22K
R38 1K
R40 200
R42 10K
R44 470
R290 100
C44 68P
R47 1.5K
C46 100/16
R51 1.2K
R50 1.2K
L5 220
C48 47/16
C49 0.01
C50 0.01
Y IN
Y
C
CN2
12V 10AB
5V 9AB
GND 11AB
2/2 GND
2/2 5V
2/2 12V
CN1
EE Y(X) 22B
EE Y(G) 22A
TO 03 CN1-12A SLOT MOTHER
Q17
Q18 Q19 Q20
L6 220
C56 0.01
C54 0.01
C55 47/16
R52 39K
R57 39K
R59 2.2K
R61 100
C51 0.022
LPF3 PELN0321
R55 200
C52 0.022
R62 2.2K
R53 22K
R54 1K
R56 200
R58 12K
R60 1K
R291
C53
R63 1.5K
GND1
LINE IN C
C OUT(X) 15B
C OUT(G) 15A
TO 03 CN1-19A SLOT MOTHER
2/2 SEP
Y OUT(X) 16B
Y OUT(G) 16A
TO 03 CN1-19B SLOT MOTHER
Q79
R268
R270 100
Q23 Q24 Q25
Q26 Q27 2SC1740S
L7 220
C67 0.01
C65 0.01
C66 47/16
R75 15K
R80 2.2K
R81 15K
R86 82
R87 12K
C63 47/16
TP1
C61 100/16
C217 27P
C62 1/50
C64 220/6.3
R90 75
R271 1.15K
R78 1K
R82 10K
R84 2.2K
Y OUT
R269 1K
R76 10K
R77 390
R79 2.2K
R83 10K
R85 33
R88 2.2K
R89 10K
IC5 TA7347P
Q29
Q30 Q31
IC6 TA7347P
Q32 Q33 Q34 2SC1740S
L8 220
C77 0.01
D14
R94 33K
R100 39K
R103 390
R105 390
TP2
C75 0.01
C76 47/16
C73 0.022
C70 0.022
R91 5.6K
R92 180
R99 5.6K
C68 0.022
C71 0.022
C69 0.022
R96 180
C72 0.022
R108 75
C74 0.022
R93 1.2K
R95 27K
R97 1.5K
R98 1.5K
R101 10K
R104 390
R106 1.05K
R107 560
R130 10K
C OUT
R102 100
2/2 SEP C
CRI C
COMP C
COMP Y
C IN
INPUT C IN(X) 19B
INPUT C IN(G) 19A
INPUT C OUT(X) 21B
INPUT C OUT(G) 21A
FROM 03 CN1-5A
TO 03 CN1-13A SLOT MOTHER
Q80 Q81
Q35 Q36
R272 33K
R274 1.2K
R276 100
Q37 Q38
Q39 Q40 Q41 2SC1740S
L9 220
C85 0.01
R113 15K
R117 2.2K
R119 15K
R124 82
R125 12K
C83 0.01
C84 47/16
COMPOSIT
C81 47/16
R111 470
C78 100/16
C218 100/16
C80 1/50
C82 220/6.3
R128 470
TP3
R112 470
C79 100/16
R277 2.2K
R116 1K
R129 75
R110 560
C219 27P
R122 2.2K
R109 1.5K
GND2
R273 8.2K
R275 560
R114 10K
R115 390
R118 2.2K
R120 10K
R121 10K
R127 10K
R123 33
R126 2.2K
COMP 2 OUT(X) 4B
COMP 2 OUT(G) 4A
COMP OUT(X) 17B
COMP OUT(G) 17A
E
F
G
H

6

— DIAGRAM (2/2) —

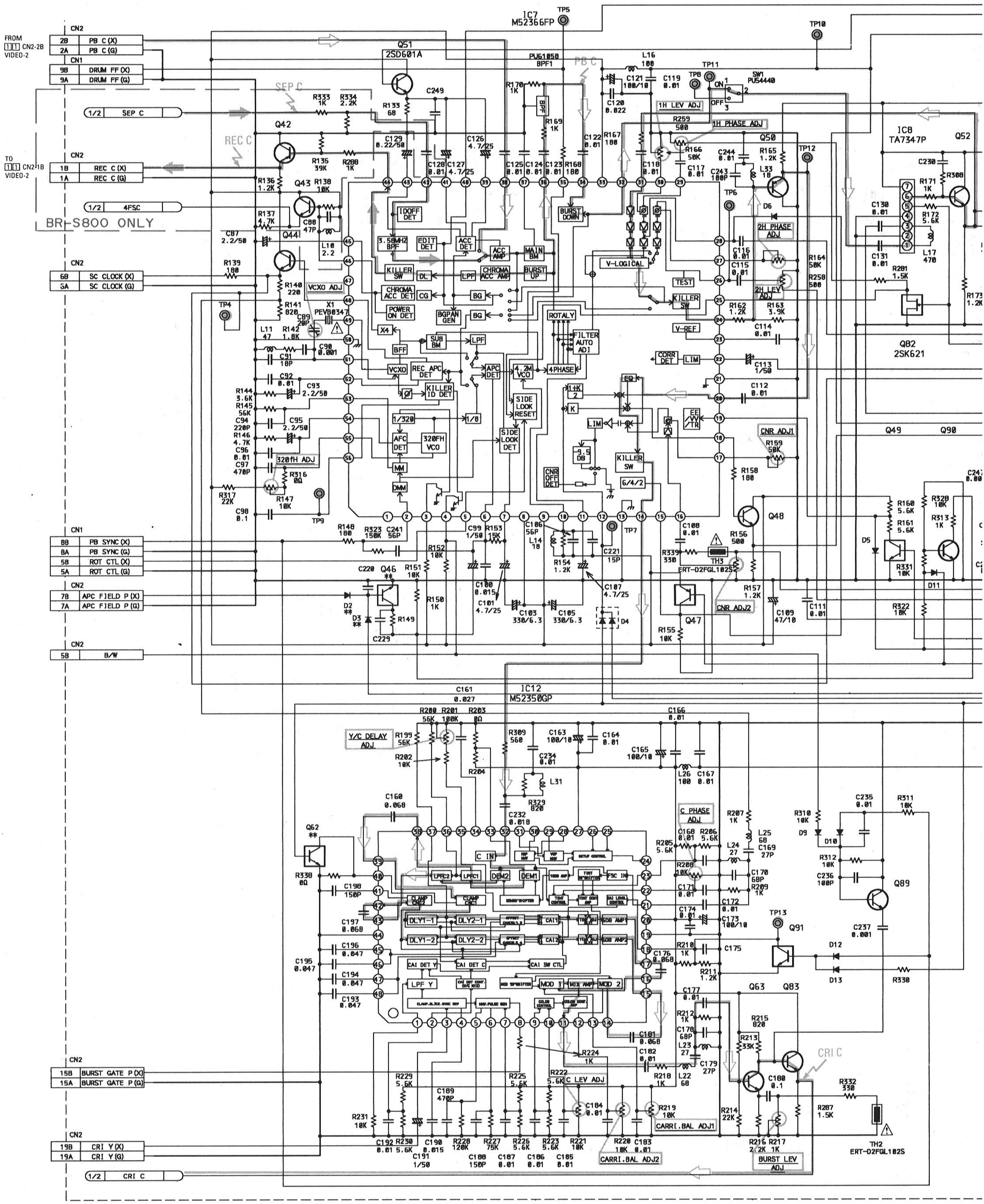
5

4

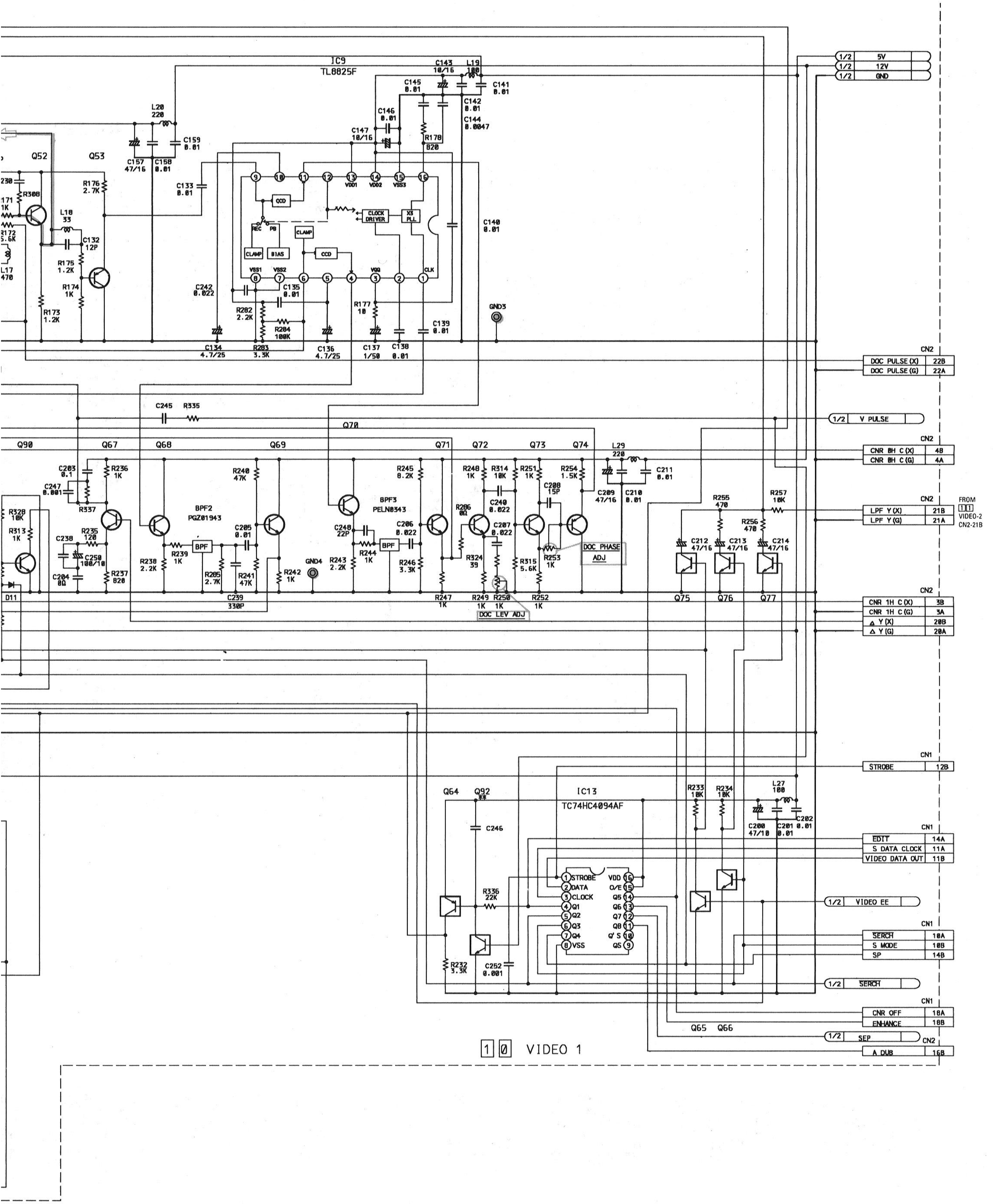
3

2

1



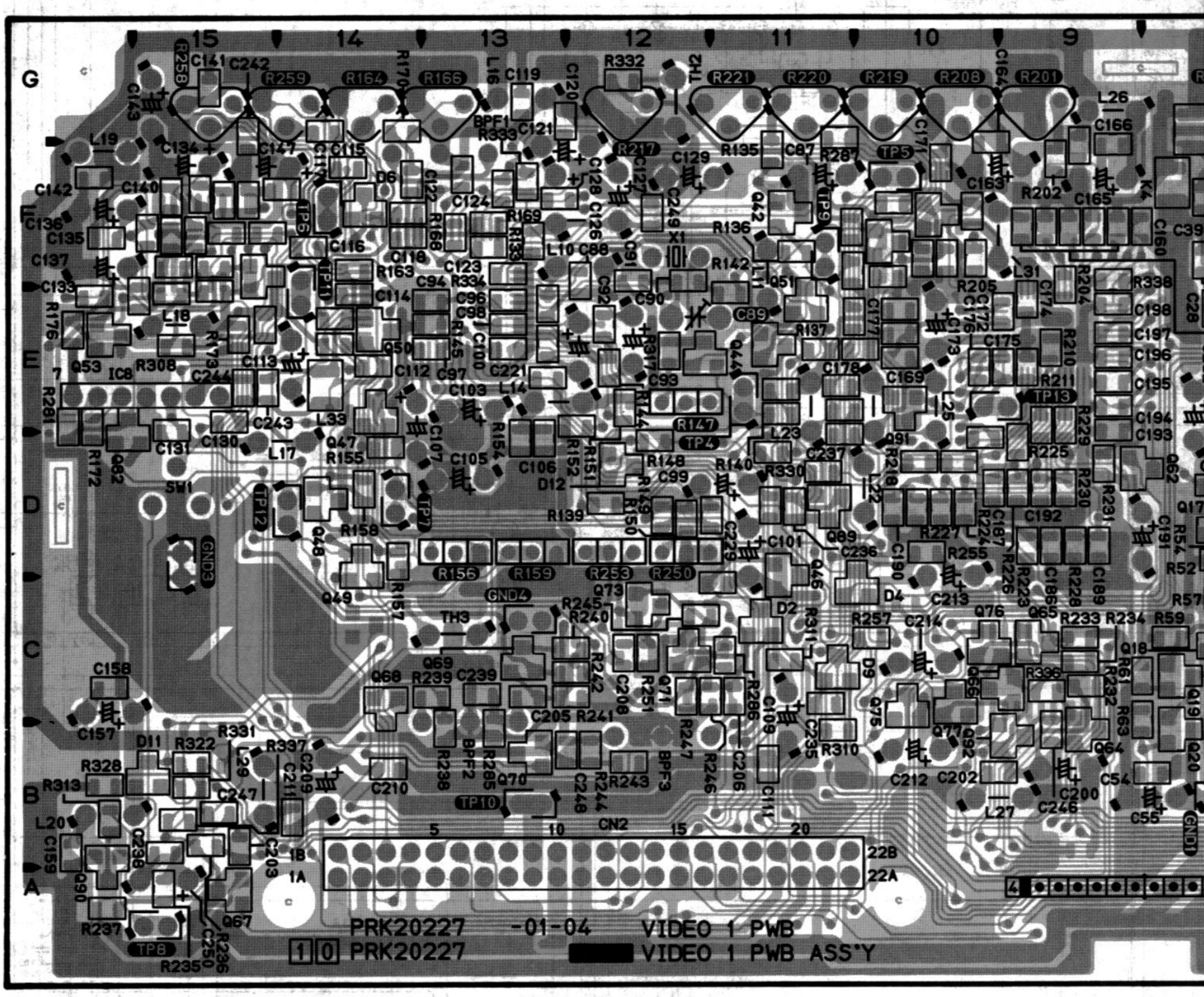
FROM
CN2-2B
VIDEO-2
CN2
2B PB C (X)
2A PB C (G)
CN1
9B DRUM FF (X)
9A DRUM FF (G)
1/2 SEP C
TO
CN2-1B
VIDEO-2
1B REC C (X)
1A REC C (G)
1/2 4FSC
BR-S800 ONLY
6B SC CLOCK (X)
6A SC CLOCK (G)
8B PB SYNC (X)
8A PB SYNC (G)
5B ROT CTL (X)
5A ROT CTL (G)
7B APC FIELD P (X)
7A APC FIELD P (G)
5B B/W
15B BURST GATE P (X)
15A BURST GATE P (G)
19B CRI Y (X)
19A CRI Y (G)
1/2 CRI C
IC7
M52366FP
TP5
Q51
2SD601A
Q42
Q43
Q44
Q46
Q47
Q48
Q50
TP4
TP6
TP7
TP8
TP9
TP10
TP11
TP12
TP13
SEP C
REC C
PB C
PU61050
BPF1
L16
100
SW1
PU54440
ON
OFF
1H LEV ADJ
1H PHASE ADJ
2H PHASE ADJ
2H LEV ADJ
CNR ADJ1
CNR ADJ2
VCXO ADJ
320fH ADJ
X1
PEVB0347
IDOFF DET
3.58MHZ BPF
EDIT DET
ACC DET
ACC AMP
MAIN BM
KILLER SW
DL
LPF
CHROMA ACC AMP
BURST UP
CHROMA ACC DET
CG
BG
POWER ON DET
BGPAN GEN
ROTALY
X4
SUB BM
BFF
FILTER AUTO ADJ
VCXO
REC APC DET
APC DET
4.2M VCO
4PHASE
KILLER ID DET
1/320
1/8
AFC DET
320FH VCO
SIDE LOOK RESET
SIDE LOOK DET
MM
DMM
BURST DOWN
V-LOGICAL
TEST
KILLER SW
V-REF
CORR DET
LIM
EQ
1+K 2
K
EE VV TR
-9.5 DB
CNR OFF DET
6/4/2
TH3
ERT-D2FGL102S
D2
D3
D4
D5
D6
D9
D10
D11
D12
D13
IC8
TA7347P
Q52
Q82
2SK621
Q49
Q90
Q89
Q91
Q62
Q63
Q83
IC12
M52350GP
Y/C DELAY ADJ
C PHASE ADJ
C IN
LPFC2
LPFC1
DEM2
DEM1
CLAMP CAI2
CLAMP CAI1
DLY1-1
DLY2-1
CAI1
DLY1-2
DLY2-2
CAI2
CAI DET Y
CAI DET C
CAI SW CTL
LPF Y
MOD 1
MIX AMP
MOD 2
C LEV ADJ
CARRI.BAL ADJ1
CARRI.BAL ADJ2
BURST LEV ADJ
CRI C
TH2
ERT-D2FGL102S


IC9
TL8825F
C143 10/16
L19 100
C141 0.01
C145 0.01
C142 0.01
C144 0.0047
C146 0.01
C147 10/16
R178 820
L20 220
C159 0.01
C157 47/16
C158 0.01
Q52
Q53
R176 2.7K
C133 0.01
R308
L18 33
C132 12P
R175 1.2K
R174 1K
R173 1.2K
R172 5.6K
L17 470
CCD
CLOCK DRIVER
X3 PLL
REC
PB
CLAMP
BIAS
VDD1
VDD2
VSS3
VSS1
VSS2
VGG
CLK
C140 0.01
C242 0.022
C135 0.01
R282 2.2K
R284 100K
R177 10
C139 0.01
GND3
C134 4.7/25
R283 3.3K
C136 4.7/25
C137 1/50
C138 0.01
1/2 5V
1/2 12V
1/2 GND
CN2
DOC PULSE (X) 22B
DOC PULSE (G) 22A
C245
R335
1/2 V PULSE
Q70
Q90
Q67
Q68
Q69
Q71
Q72
Q73
Q74
L29 220
C211 0.01
CNR 0H C (X) 4B
CNR 0H C (G) 4A
C203 0.1
R236 1K
C247 0.001
R337
R240 47K
BPF2
PGZ01943
BPF3
PELN0343
R245 8.2K
R248 1K
R314 10K
R251 1K
R254 1.5K
C240 0.022
C208 15P
C209 47/16
C210 0.01
R255 470
R257 10K
R256 470
LPF Y (X) 21B
LPF Y (G) 21A
FROM
VIDEO-2
CN2-21B
R328 10K
R313 1K
C238
R235 120
C250 100/10
C204 0Ω
R237 820
D11
C205 0.01
R238 2.2K
R239 1K
BPF
R205 2.7K
R241 47K
R242 1K
C239 330P
GND4
C248 22P
C206 0.022
R243 2.2K
R244 1K
R246 3.3K
R206 0Ω
C207 0.022
R324 39
R315 5.6K
R253 1K
DOC PHASE ADJ
C212 47/16
C213 47/16
C214 47/16
Q75
Q76
Q77
R247 1K
R249 1K
R250 1K
R252 1K
DOC LEV ADJ
CNR 1H C (X) 3B
CNR 1H C (G) 3A
Δ Y (X) 20B
Δ Y (G) 20A
CN1
STROBE 12B
Q64
Q92
IC13
TC74HC4094AF
R233 10K
R234 10K
L27 100
C202
C200 47/10
C201 0.01
C246
EDIT 14A
S DATA CLOCK 11A
VIDEO DATA OUT 11B
R336 22K
1 STROBE
2 DATA
3 CLOCK
4 Q1
5 Q2
6 Q3
7 Q4
8 VSS
VDD 16
O/E 15
Q5 14
Q6 13
Q7 12
Q8 11
Q'S 10
QS 9
1/2 VIDEO EE
SERCH 10A
S MODE 10B
SP 14B
R232 3.3K
C252 0.001
1/2 SERCH
CNR OFF 18A
ENHANCE 18B
Q65
Q66
1/2 SEP
A DUB 16B

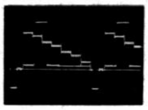
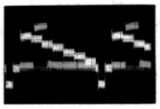
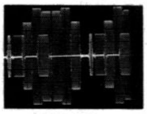
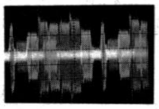
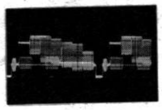
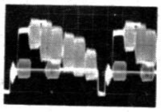
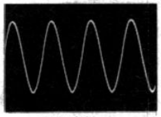
10 VIDEO 1

4.21 VIDEO-1 CIRCUIT BOARD

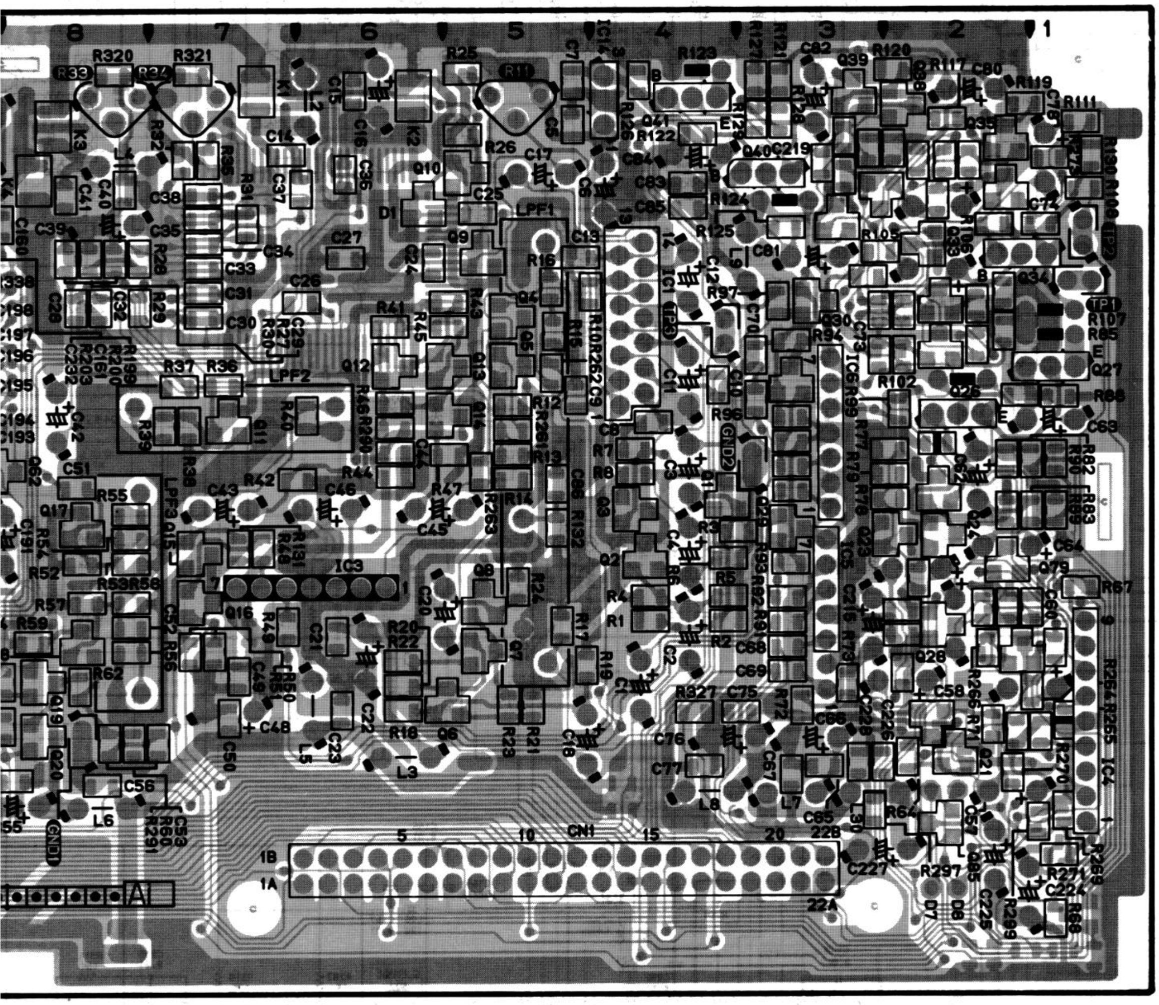
— SOLDER Side

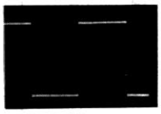
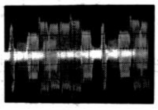
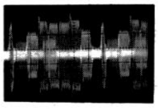
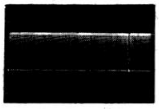

15
14
13
12
11
10
9
G
E
D
C
B
A
SW1
GND3
GND4
GND1
CN2
5
10
15
20
22B
22A
1B
1A
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP12
TP13
IC8
X1
BPF1
BPF2
BPF3
TH2
TH3
PRK20227 -01-04 VIDEO 1 PWB
1 0 PRK20227
VIDEO 1 PWB ASS'Y

— MAIN WAVEFORMS OF VIDEO-1 CIRCUIT —

TP1		TP2		TP3		TP4	
							
[REC] 2.1 Vp-p	[PB] 2.0 Vp-p	[REC] 641 mV (Burst level)	[PB] 624 mV (Burst level)	[REC] 2.1 Vp-p	[PB] 2.0 Vp-p	0.7 Vp-p (3.58 MHz)	

Side —


8
7
6
5
4
3
2
1
CN1
IC1
IC3
IC4
IC5
IC6
LPF1
LPF2
LPF3
TP1
GND1
GND2
1A
1B
22A
22B

TP5	TP11	TP12	TP13
			
4.4 Vp-p (30 Hz)	[PB] 460 mV (Burst level)	[PB] 280 mV (burst level)	2.6 Vp-p (60 Hz)

— DC Voltage (1/2) —

SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC1	1	4.5	4.4
	2	3.0	3.0
	3	5.1	5.1
	4	1.9	1.9
	5	1.6	1.6
	6	0.0	2.2
	7	2.9	2.9
	8	0.0	0.0
	9	2.9	2.9
	10	0.0	0.0
	11	2.6	2.6
	12	3.1	3.1
	13	3.2	3.2
	14	2.1	2.1
IC2	1	0.0	0.0
	2	0.0	0.0
	3	0.0	—
	4	0.0	0.0
	5	0.0	0.0
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	0.0	0.0
	10	0.0	0.0
	11	2.5	2.5
	12	0.0	0.0
	13	5.1	5.1
	14	1.5	1.5
	15	1.5	1.5
	16	1.5	1.5
	17	4.8	5.1
	18	0.0	0.0
	19	0.0	0.0
	20	2.6	2.6
	21	0.7	0.7
	22	0.6	0.0
	23	0.0	0.0
	24	0.0	0.0
	25	1.4	1.4
	26	5.1	5.1
	27	2.7	2.7
	28	5.1	5.1
	29	5.1	5.1
	30	0.0	0.0
	31	0.4	0.0
	32	3.7	3.7
	33	1.0	1.0
	34	1.0	1.0
	35	0.0	0.0
	36	1.2	1.2
	37	5.1	5.1
	38	0.0	0.0
	39	0.5	0.5
	40	0.0	3.7
	41	1.0	1.0
	42	1.1	1.1
	43	0.0	—
	44	0.0	1.7
	45	0.0	1.8
	46	0.0	1.7
	47	0.0	—
	48	0.0	—
	49	0.0	2.0
	50	0.0	—
	51	0.0	1.7
	52	0.0	0.0
	53	5.1	5.1
	54	0.0	1.0
	55	0.0	0.0
	56	5.1	5.1
	57	0.0	0.0
	58	0.0	0.0
	59	0.0	0.0
	60	0.0	0.0
	61	0.0	0.0
	62	0.0	0.0
	63	0.0	—
	64	0.0	0.0
	65	0.0	0.0
	66	0.0	0.0
	67	5.1	5.1
	68	0.0	0.0
	69	0.0	0.0
	70	0.0	0.0
	71	0.0	0.0
	72	0.0	0.0
	73	5.1	5.1
	74	0.0	0.0
	75	0.0	0.0
	76	0.0	0.0
	77	0.0	0.0
	78	0.0	0.0
	79	0.0	0.0
	80	0.0	0.0
IC3	1	8.3	8.3
	2	0.0	0.0
	3	8.3	8.3
	4	0.0	0.0
	5	0.0	0.0
	6	7.5	7.5
	7	11.9	11.9
IC4	1	4.8	4.8
	2	11.7	11.7
	3	4.1	0.8
	4	4.1	4.1
	5	0.0	0.0
	6	4.3	4.7
	7	0.0	0.0
	8	4.3	4.3
	9	3.0	0.0
IC5	1	8.2	8.3
	2	0.0	0.0
	3	8.3	8.3
	4	0.0	0.0
	5	0.0	0.0
	6	7.5	7.5
	7	11.8	11.9
IC6	1	8.3	8.3
	2	0.0	0.0
	3	8.2	8.3
	4	0.0	0.0
	5	4.8	0.0
	6	7.5	7.5
	7	11.8	11.9
IC7	1	0.0	0.0
	2	0.5	0.5
	3	0.6	0.6
	4	0.4	0.4
	5	2.6	2.6
	6	0.0	3.6
	7	3.6	3.6
	8	5.1	5.0
	9	5.1	0.0
	10	5.1	5.0
	11	3.4	3.4
	12	4.2	2.8
	13	0.0	0.0
	14	4.6	2.4
	15	0.1	0.1
	16	4.0	3.8
	17	3.5	3.5
	18	4.5	3.1
	19	5.1	2.5
	20	4.0	2.8
	21	0.0	0.0
	22	1.6	1.6
	23	3.1	3.5
	24	4.3	2.7
	25	5.3	5.3
	26	3.1	3.5
	27	3.7	3.6
	28	4.5	2.7
	29	3.1	3.5
	30	2.9	2.8
	31	3.1	3.5
	32	2.5	2.5
	33	5.1	5.0
	34	3.8	3.7
	35	2.4	2.4
	36	2.0	2.0
	37	3.1	3.0
	38	4.2	4.2
	39	2.6	2.6
	40	2.4	2.4
	41	2.6	2.6
	42	3.1	3.1
	43	2.6	2.6
	44	2.8	2.3
	45	3.2	3.1
	46	5.1	5.0
	47	0.0	0.0
	48	1.9	2.1
	49	3.0	3.4
	50	0.0	0.0
	51	4.0	4.0
	52	0.0	4.0
	53	0.0	2.1
	54	3.8	3.6
	55	3.4	3.4
	56	2.0	3.8
IC8	1	8.3	8.3
	2	0.0	0.0
	3	8.3	8.3
	4	0.0	0.0
	5	0.0	0.0
	6	7.5	7.6
	7	11.9	12.0
IC9	1	2.6	2.6
	2	2.9	2.9
	3	11.2	10.6
	4	3.4	3.4
	5	2.0	1.8
	6	2.9	3.2
	7	0.0	0.0
	8	0.0	0.0
	9	2.6	2.7
	10	1.9	1.7
	11	3.4	3.4
	12	5.1	5.1
	13	5.2	5.2
	14	5.2	5.2
	15	0.0	0.0
	16	1.7	1.7
IC12	1	2.8	2.8
	2	2.5	2.5
	3	2.5	2.9
	4	2.6	2.3
	5	2.4	2.5
	6	2.6	2.6
	7	2.5	2.5
	8	2.2	1.9
	9	2.5	2.5
	10	2.6	0.0
	11	1.7	1.7
	12	1.5	0.0
	13	3.0	3.0
	14	2.9	2.9
	15	2.0	2.0
	16	2.9	3.0
	17	2.0	2.1
	18	2.3	2.3
	19	0.0	0.0
	20	4.9	4.9
	21	2.8	2.8
	22	2.7	2.7
	23	0.0	2.5
	24	1.4	1.4
	25	2.4	2.4
	26	1.6	1.6
	27	4.9	4.9
	28	1.1	0.0
	29	0.0	0.0
	30	2.1	2.3
	31	—	—
	32	2.9	2.9
	33	0.0	0.0
	34	2.9	2.9
	35	2.8	2.8
	36	2.8	2.8
	37	2.8	2.8
	38	2.3	2.4
	39	3.6	3.6
	40	0.0	0.0
	41	2.2	2.2
	42	2.3	2.3
	43	3.6	3.6
	44	0.0	0.0
	45	3.1	3.1
	46	3.1	3.1
	47	3.1	3.1
	48	3.1	3.1
IC13	1	5.2	5.2
	2	0.0	0.0
	3	0.0	0.0
	4	5.2	5.3
	5	5.2	5.2
	6	5.2	5.2
	7	5.2	5.2
	8	0.0	0.0
	9	0.0	0.0
	10	0.0	0.0
	11	0.0	0.0
	12	0.0	0.0
	13	5.2	5.3
	14	5.3	5.3
	15	5.3	5.3
	16	5.3	5.3
IC14	1	·	·
	2	·	·
	3	·	·
TRANSISTOR			
Q1	B	2.2	1.7
	C	5.1	5.1
	E	1.7	2.2
Q2	B	2.2	1.6
	C	5.1	5.1
	E	1.6	2.2
Q3	B	4.5	4.5
	C	5.1	5.1
	E	4.0	4.0
Q4	B	6.0	6.0
	C	11.9	11.9
	E	5.4	5.4
Q5	B	6.0	6.0
	C	11.9	11.9
	E	5.4	5.3
Q6	B	2.8	2.8
	C	11.0	11.0
	E	2.2	2.2
Q7	B	11.0	11.0
	C	5.0	4.9
	E	11.6	11.6
Q8	B	5.0	4.9
	C	11.9	11.9
	E	4.3	4.3
Q9	B	4.5	4.5
	C	0.2	0.2
	E	0.0	0.0
Q10	B	0.0	0.1
	C	4.8	4.8
	E	0.0	0.0
Q11	B	3.9	3.9
	C	11.9	11.9
	E	3.3	3.3
Q12	B	2.5	2.5
	C	10.9	10.9
	E	1.9	1.9
Q13	B	10.9	10.9
	C	5.4	5.4
	E	11.5	11.5
Q14	B	5.4	5.4
	C	11.9	11.9
	E	4.8	4.8
Q15	B	7.5	7.5
	C	11.9	11.9
	E	6.8	6.8
Q16	B	7.5	7.5
	C	11.9	11.9
	E	6.8	6.8
Q17	B	3.9	3.9
	C	12.0	12.0
	E	3.3	3.3
Q18	B	2.9	2.9
	C	11.1	11.2
	E	2.4	2.3

— DC Voltage (2/2) —

SYMBOL	No.	REC	PB
Q19	B	11.1	11.2
	C	6.5	6.5
	E	11.8	11.8
Q20	B	6.5	6.5
	C	12.0	12.0
	E	5.9	5.9
Q21	B	5.8	5.8
	C	11.7	11.7
	E	5.2	5.2
Q22	B	4.1	4.1
	C	11.7	11.7
	E	3.5	3.5
Q23	B	4.5	4.5
	C	11.7	11.7
	E	3.9	3.9
Q24	B	4.6	4.6
	C	7.4	7.4
	E	4.0	4.0
Q25	B	.	.
	C	.	.
	E	.	.
Q26	B	6.8	6.8
	C	9.3	9.3
	E	6.1	6.1
Q27	B	1.7	1.7
	C	6.1	6.1
	E	1.0	1.0
Q28	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q29	B	7.5	7.5
	C	11.8	11.9
	E	6.8	6.9
Q30	B	5.0	0.5
	C	11.8	11.9
	E	4.4	0.1
Q31	B	5.0	0.5
	C	11.8	11.9
	E	4.4	0.1
Q32	B	.	.
	C	.	.
	E	.	.
Q33	B	9.7	9.1
	C	5.9	5.9
	E	9.1	9.8
Q34	B	5.9	6.0
	C	11.8	11.9
	E	5.3	5.3
Q35	B	6.1	6.1
	C	11.8	11.8
	E	5.5	5.5
Q36	B	.	.
	C	.	.
	E	.	.
Q37	B	.	.
	C	.	.
	E	.	.
Q38	B	4.6	4.6
	C	7.6	7.6
	E	4.0	4.0
Q39	B	7.5	7.6
	C	11.8	11.8
	E	7.2	7.2
Q40	B	7.2	7.2
	C	9.3	9.2
	E	6.3	6.3

SYMBOL	No.	REC	PB
Q41	B	1.7	1.7
	C	6.3	6.3
	E	1.0	1.0
Q42	B	2.2	2.2
	C	0.0	0.0
	E	2.9	2.8
Q43	B	.	.
	C	.	.
	E	.	.
Q44	B	2.1	2.1
	C	5.1	5.0
	E	1.5	1.5
Q46	B	4.6	0.0
	C	0.0	0.0
	E	0.0	0.0
Q47	B	.	.
	C	.	.
	E	.	.
Q48	B	4.5	3.0
	C	5.1	5.0
	E	3.9	2.4
Q49	B	0.0	3.8
	C	5.1	0.0
	E	0.0	0.0
Q50	B	3.3	2.1
	C	0.0	0.0
	E	4.0	2.7
Q51	B	1.8	1.9
	C	5.1	5.1
	E	1.2	1.2
Q52	B	7.5	7.5
	C	11.9	12.0
	E	6.9	6.9
Q53	B	3.1	3.1
	C	0.0	0.0
	E	3.8	3.8
Q63	B	.	.
	C	.	.
	E	.	.
Q64	B	5.2	5.2
	C	2.4	2.4
	E	5.3	5.3
Q65	B	5.1	5.1
	C	0.0	0.0
	E	0.0	0.0
Q66	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q67	B	2.8	2.8
	C	8.1	8.2
	E	2.1	2.2
Q68	B	3.4	3.4
	C	11.9	11.9
	E	2.8	3.0
Q69	B	5.0	5.1
	C	11.9	11.9
	E	4.4	4.5
Q70	B	3.4	3.4
	C	11.9	11.9
	E	2.8	2.8
Q71	B	3.4	3.4
	C	11.9	11.9
	E	2.7	2.8
Q72	B	2.8	2.7
	C	9.8	9.8
	E	2.1	2.1

SYMBOL	No.	REC	PB
Q73	B	4.2	4.3
	C	8.3	8.3
	E	3.6	3.7
Q74	B	3.6	3.6
	C	0.0	0.0
	E	4.3	4.3
Q75	B	0.0	3.8
	C	2.1	0.0
	E	0.0	0.0
Q76	B	0.0	0.0
	C	1.6	1.3
	E	0.0	0.0
Q77	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q78	B	.	.
	C	.	.
	E	.	.
Q79	B	.	.
	C	.	.
	E	.	.
Q80	B	.	.
	C	.	.
	E	.	.
Q81	B	.	.
	C	.	.
	E	.	.
Q82	B	0.0	0.0
	C	5.3	5.3
	E	0.0	0.0
Q83	B	.	.
	C	.	.
	E	.	.
Q84	B	1.6	1.0
	C	7.5	7.5
	E	1.0	1.6
Q85	B	5.6	5.6
	C	12.0	12.0
	E	5.0	5.0
Q86	B	4.9	4.9
	C	12.0	12.0
	E	4.3	4.3
Q87	B	5.2	5.2
	C	12.0	12.0
	E	4.6	4.6
Q88	B	4.4	4.4
	C	12.0	12.0
	E	3.8	3.8
Q89	B	0.0	0.1
	C	0.0	0.0
	E	0.0	0.0
Q90	B	0.7	0.7
	C	0.0	0.0
	E	0.0	0.0
Q91	B	1.4	1.7
	C	2.3	2.3
	E	0.0	0.0

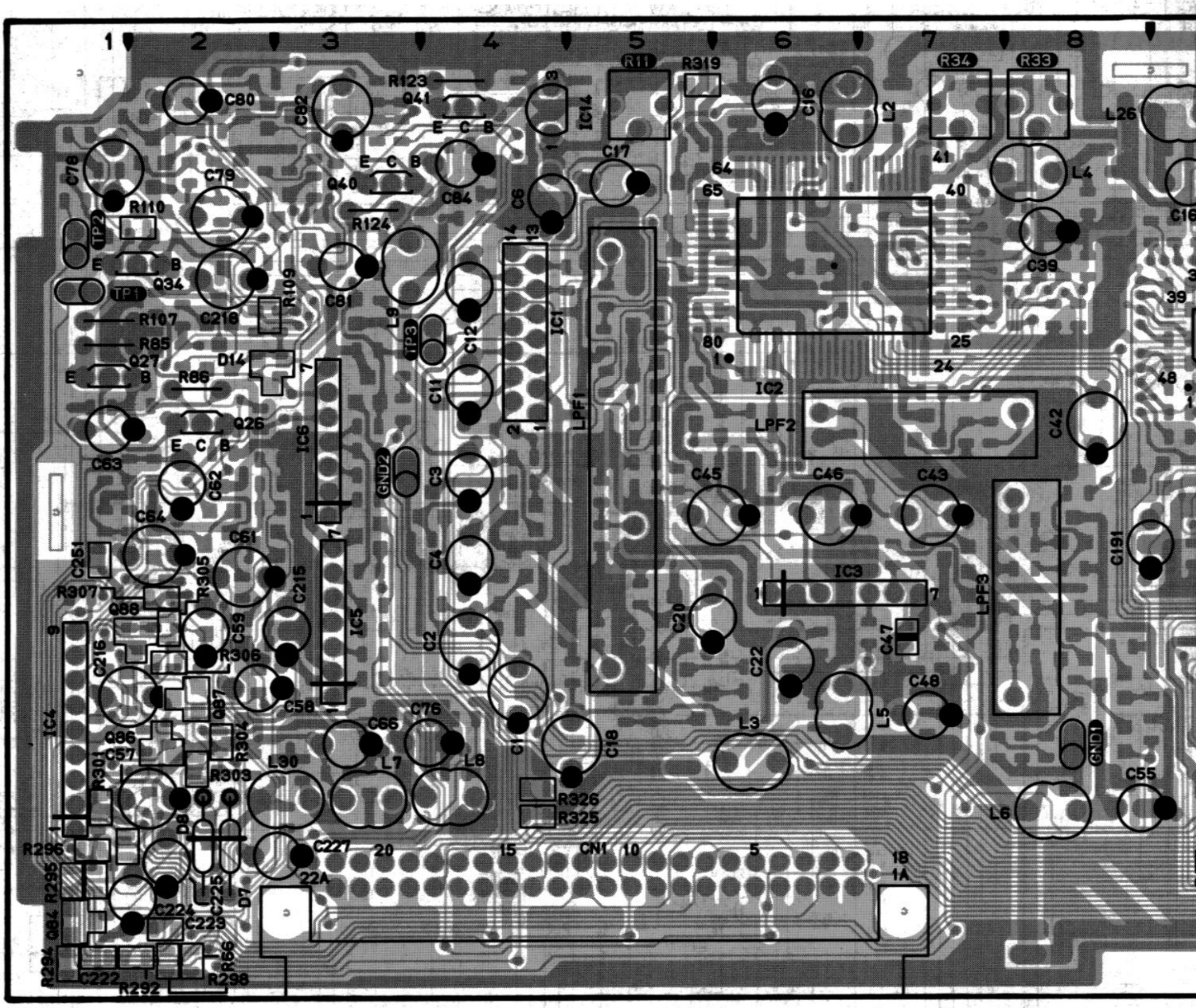
CONNECTOR

SYMBOL	No.	REC	PB
CN1	1A	0.0	0.0
	1B	0.0	0.0
	2A	0.0	0.0
	2B	0.0	0.0
	3A	0.0	0.0
	3B	0.0	0.0
	4A	0.0	0.0
	4B	0.0	0.0
	5A	0.0	0.0
	5B	2.6	2.6
	6A	0.0	0.0
	6B	4.1	4.1
	7A	0.0	0.0
	7B	0.2	0.2
	8A	0.0	0.0
	8B	0.5	0.5
	9A	0.0	0.0
	9B	2.4	2.4
	10A	5.2	5.2
	10B	5.2	5.2
	11A	0.0	0.0
	11B	0.0	0.0
	12A	0.6	1.9
	12B	5.2	5.2
	13A	5.1	0.0
	13B	4.1	4.1
	14A	5.2	5.2
	14B	5.2	5.2
	15A	0.0	0.0
	15B	0.0	0.0
	16A	0.0	0.0
	16B	0.0	0.0
	17A	0.0	0.0
	17B	0.0	0.0
	18A	5.3	5.3
	18B	5.2	5.2
	19A	0.0	0.0
	19B	6.8	6.9
	20A	0.0	0.0
	20B	6.8	6.9
	21A	0.0	0.0
	21B	6.8	6.9
	22A	0.0	0.0
	22B	6.8	6.9
CN2	1A	0.0	0.0
	1B	2.9	2.8
	2A	0.0	0.0
	2B	4.1	4.1
	3A	0.0	0.0
	3B	2.7	2.7
	4A	0.0	0.0
	4B	3.9	2.5
	5A	2.2	0.0
	5B	0.4	0.4
	6A	0.0	0.0
	6B	1.4	1.3
	7A	0.0	0.0
	7B	1.8	0.0
	8A	2.2	0.0
	8B	2.0	0.0
	9A	5.3	5.3
	9B	5.3	5.3
	10A	12.0	12.1
	10B	12.0	12.1
	11A	0.0	0.0
	11B	0.0	0.0
	12A	5.2	5.2
	12B	5.2	5.2
	13A	12.9	12.9
	13B	12.9	12.9
	14A	0.0	0.0
	14B	0.0	0.0
	15A	0.0	0.0
	15B	1.7	1.8
	16A	2.4	0.0
	16B	0.0	0.0
	17A	0.0	0.0
	17B	7.2	7.2
	18A	2.4	—
	18B	2.4	—
	19A	0.0	0.0
	19B	4.3	4.3
	20A	0.0	0.0
	20B	2.8	2.8
	21A	0.0	0.0
	21B	2.0	2.0
	22A	0.0	0.0
	22B	0.0	0.0

6

5

— PARTS S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2
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7
8
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IC14
C16
L2
41
40
L26
C78
C79
Q40
E C B
C84
R124
C17
C6
64
65
L4
C16
C39
R110
TP2
TP1
E B
Q34
C218
R109
C81
L9
TP3
C12
14
13
IC1
80
1
25
24
39
48
R107
R85
Q27
E B
R86
D14
C11
IC2
LPF2
LPF1
C42
Q26
E C B
C63
C62
IC6
GND2
C3
C45
C46
C43
C64
C251
R307
Q88
C61
R305
C215
C59
R306
C216
Q87
C58
IC5
C4
C2
C20
IC3
C22
C47
LPF3
C191
9
IC4
Q86
C57
R304
R301
R303
C66
C76
L30
L7
L8
C1
C18
L3
L5
C48
GND1
C55
L6
R326
R325
R296
R295
D8
C225
D7
C227
20
22A
15
CN1
10
5
1B
1A
Q84
C224
C229
R294
C222
R292
R66
R298

4

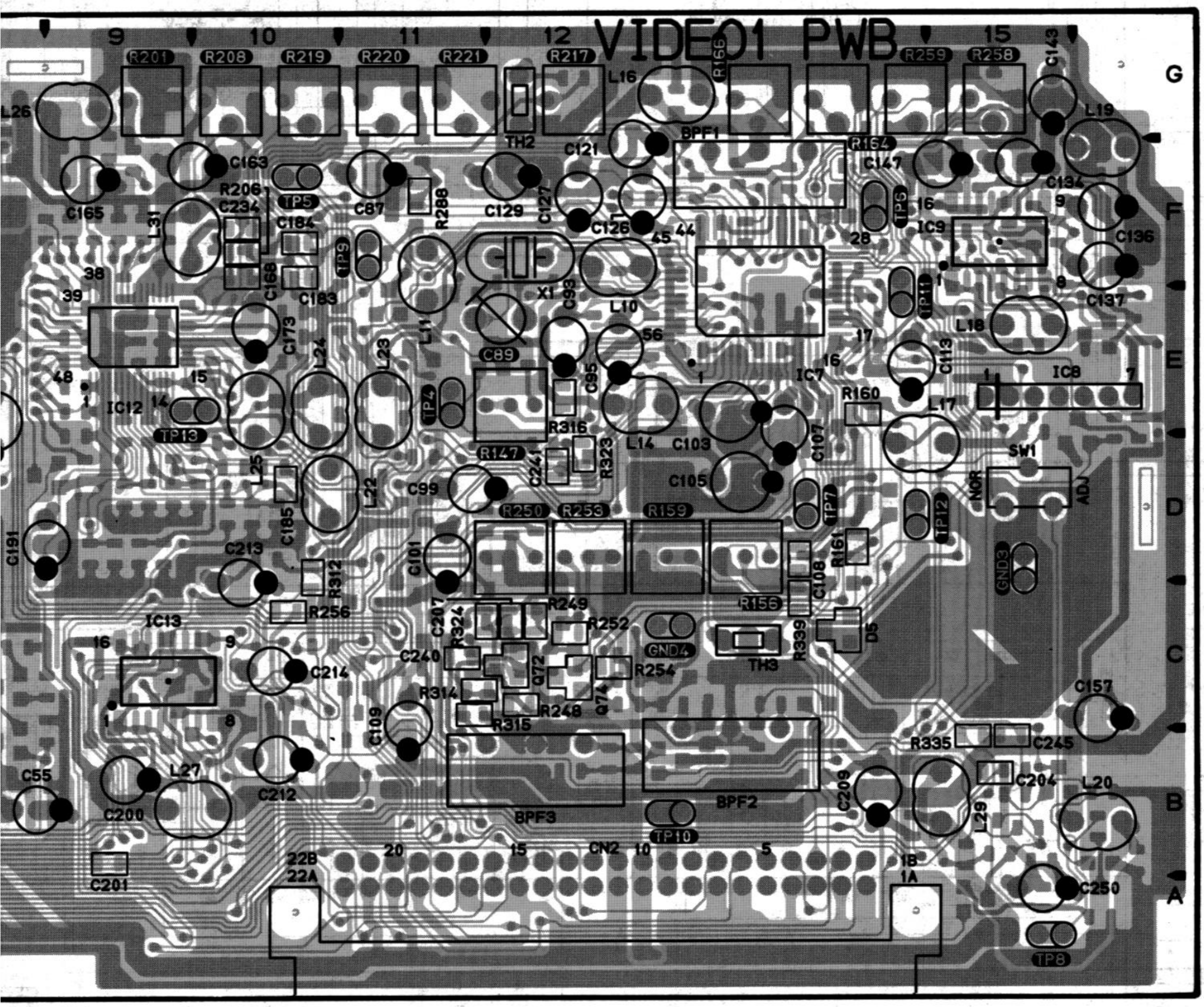
3

2

1

A B C

ARTS Side —


VIDEO1 PWB
9
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G
F
E
D
C
B
A
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R208
R219
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R221
R217
R166
R259
R258
C143
L26
TH2
L16
BPF1
L19
C165
C163
R206
C234
C184
TP5
C87
R288
C129
C121
C127
C126
45
44
R164
C147
TP6
16
IC9
28
C134
9
C136
L31
38
39
C168
C183
TP9
L11
X1
C93
L10
TP11
1
8
C137
L18
48
IC12
14
15
TP13
C173
L24
L23
C89
C95
56
IC7
17
16
C113
IC8
7
TP4
R316
R323
C241
R147
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C103
C107
R160
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SW1
NOR
ADJ
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L22
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C99
C105
TP7
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TH3
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C240
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Q74
R314
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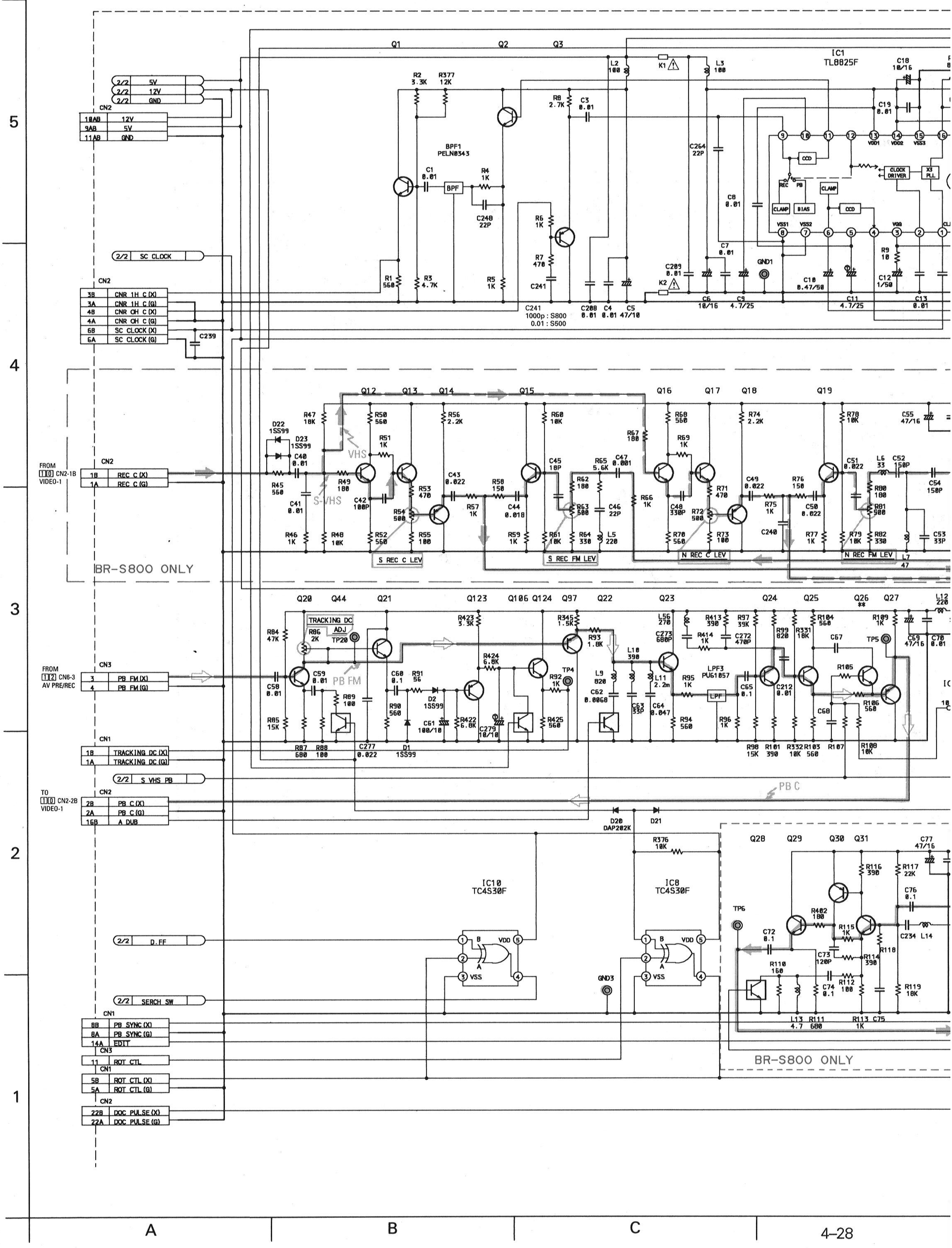
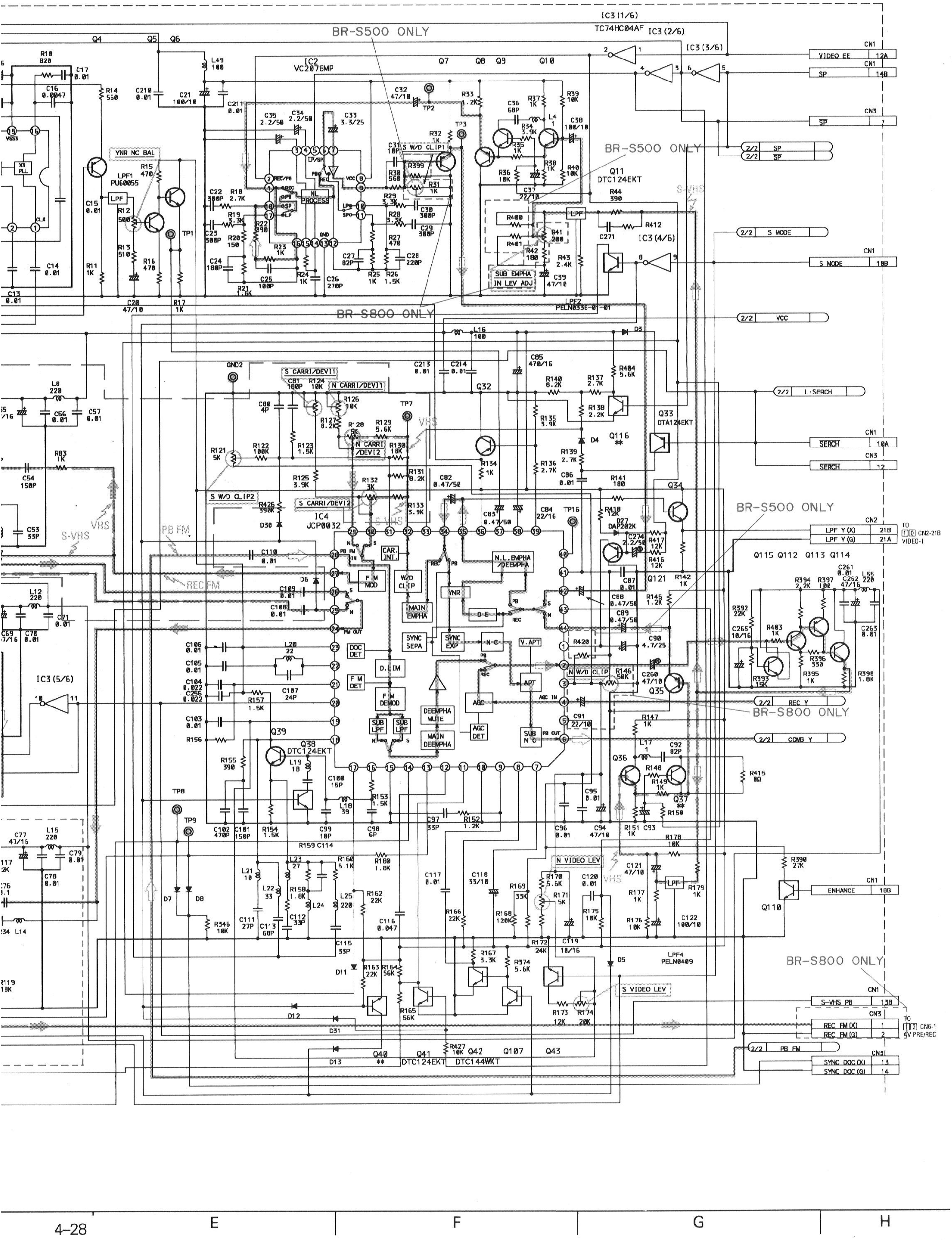
R248
C157
C109
R335
C245
C204
C55
L27
C212
BPF3
BPF2
C209
L29
L20
C200
TP10
C201
22B
22A
20
CN2
10
5
1B
1A
C250
TP8

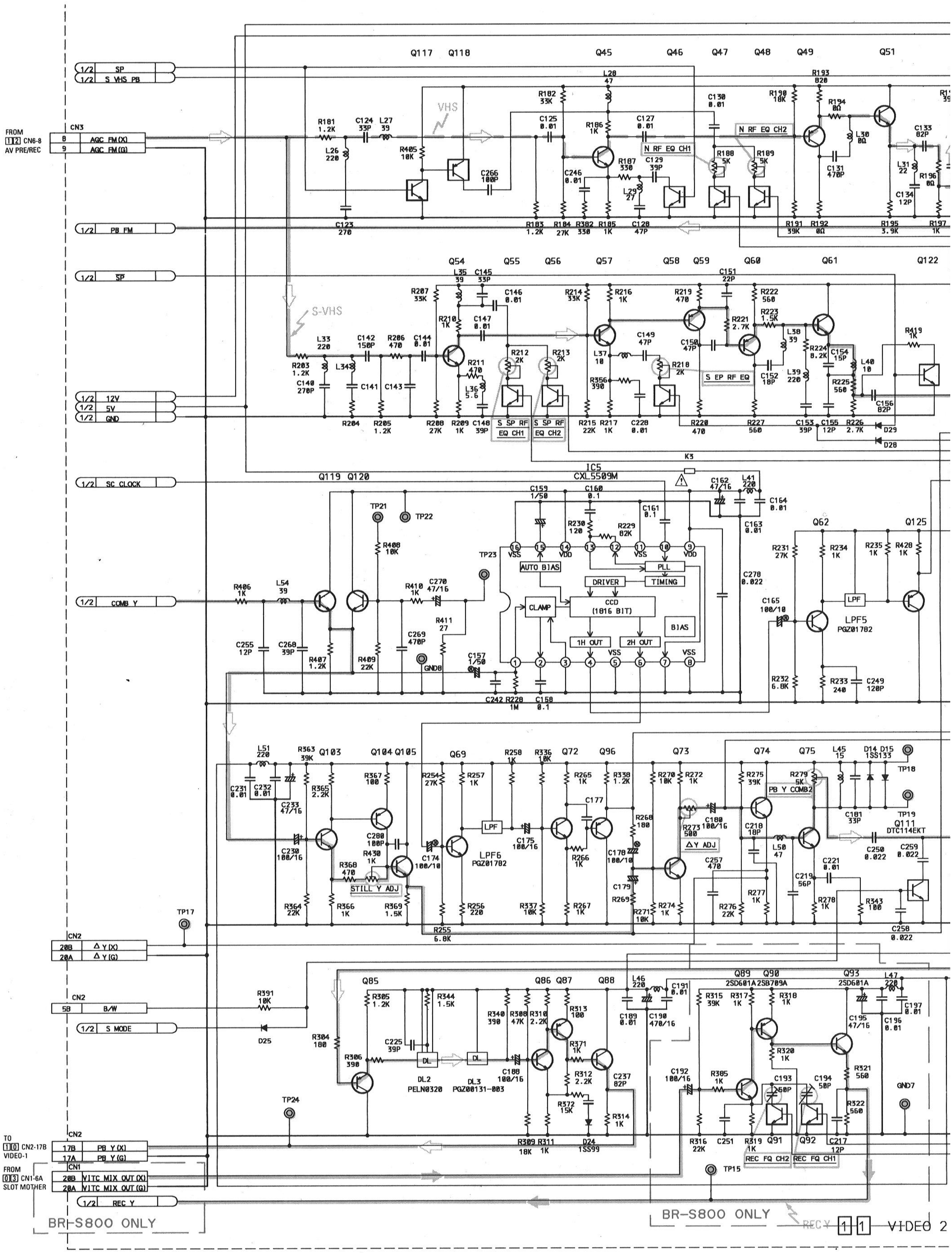
4.22 VIDEO-2 SCHEMATIC DIAGRAM

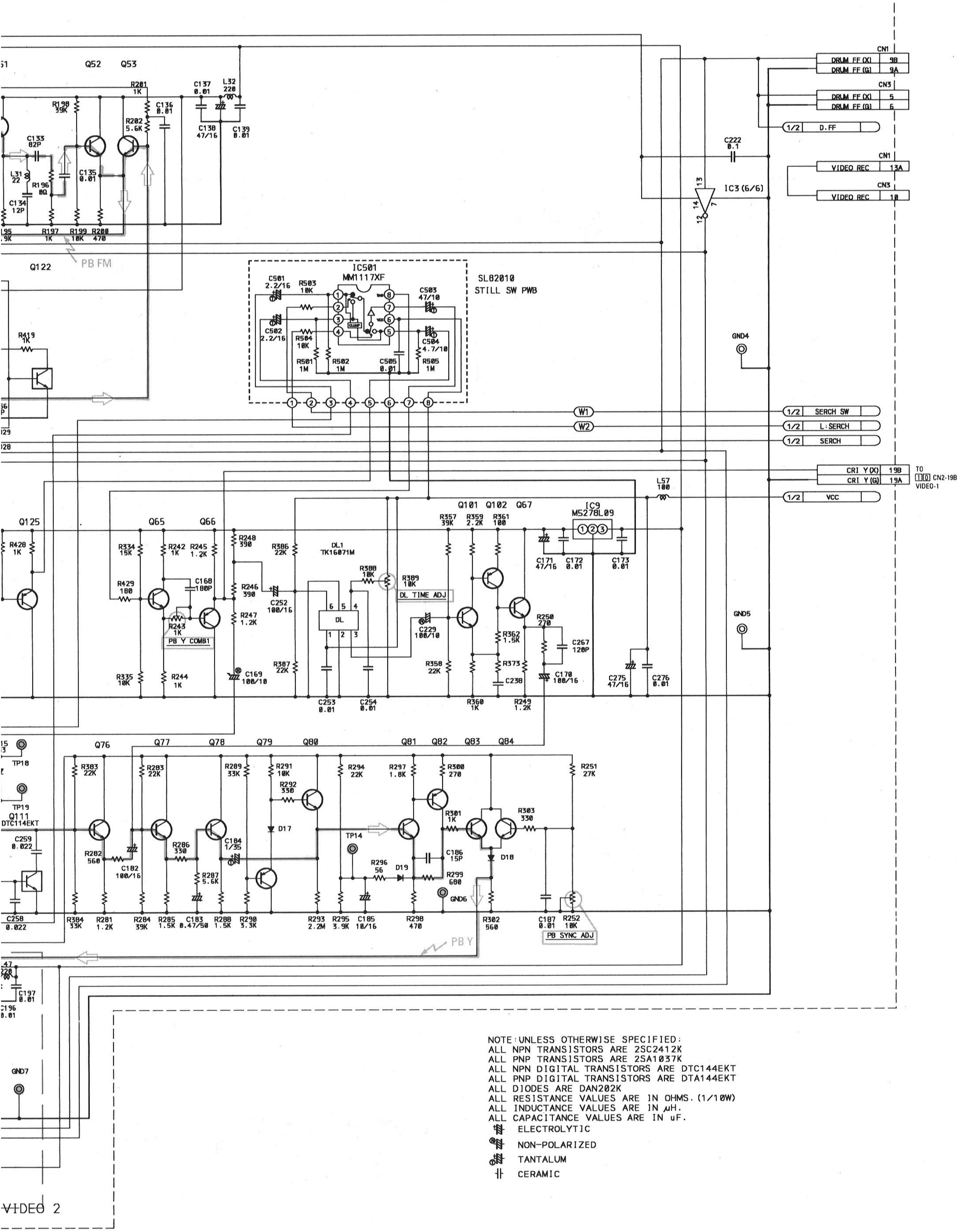
— DIAGRAM (1/2) —


6
5
4
3
2
1
A
B
C
CN2
2/2 5V
2/2 12V
2/2 GND
10AB 12V
9AB 5V
11AB GND
2/2 SC CLOCK
3B CNR 1H C (X)
3A CNR 1H C (G)
4B CNR 0H C (X)
4A CNR 0H C (G)
6B SC CLOCK (X)
6A SC CLOCK (G)
C239
Q1
Q2
Q3
R2 3.3K
R377 12K
R8 2.7K
C3 0.01
BPF1 PELN0343
C1 0.01
R4 1K
BPF
C240 22P
R6 1K
R7 470
C241
R1 560
R3 4.7K
R5 1K
C241 1000p : S800 0.01 : S500
C208 0.01
C4 0.01
C5 47/10
L2 100
K1
L3 100
C264 22P
C8 0.01
C7 0.01
C209 0.01
K2
GND1
C6 10/16
C9 4.7/25
C10 0.47/50
C11 4.7/25
C12 1/50
C13 0.01
R9 10
IC1 TL0825F
C18 10/16
C19 0.01
CCD
REC PB
CLAMP
BIAS
CLOCK DRIVER
X3 PLL
VSS1
VSS2
VDD1
VDD2
VSS3
VGG
FROM CN2-1B VIDEO-1
1B REC C (X)
1A REC C (G)
BR-S800 ONLY
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
D22 1SS99
D23 1SS99
R47 10K
C40 0.01
R45 560
C41 0.01
R46 1K
R48 10K
R49 100
R50 560
R51 1K
VHS
S-VHS
C42 100P
R53 470
R54 500
R52 560
R55 100
R56 2.2K
C43 0.022
R58 150
R57 1K
C44 0.018
R59 1K
R60 10K
C45 10P
R62 100
R63 500
R61 10K
R64 330
R65 5.6K
C47 0.001
C46 22P
L5 220
R66 1K
R67 100
R68 560
R69 1K
C48 330P
R72 500
R70 560
R71 470
R73 100
R74 2.2K
C49 0.022
R75 1K
R76 150
C50 0.022
C240
R77 1K
R78 10K
C51 0.022
L6 33
C52 150P
C54 150P
C55 47/16
R80 100
R81 500
R79 10K
R82 330
C53 33P
L7 47
S REC C LEV
S REC FM LEV
N REC C LEV
N REC FM LEV
FROM CN6-3 AV PRE/REC
CN3
3 PB FM (X)
4 PB FM (G)
Q20
Q44
Q21
Q123
Q106
Q124
Q97
Q22
Q23
Q24
Q25
Q26 **
Q27
TRACKING DC ADJ
R86 2K
TP20
R84 47K
C58 0.01
C59 0.01
PB FM
R89 100
R85 15K
R87 680
R88 100
C277 0.022
C60 0.1
R91 56
D2 1SS99
R90 560
C61 100/10
D1 1SS99
R422 6.8K
R423 3.3K
R424 6.8K
C279 10/10
R345 1.5K
R93 1.0K
TP4
R92 1K
R425 560
L10 390
L9 820
C62 0.0068
C63 33P
L11 2.2m
C64 0.047
L56 270
C273 680P
R413 390
R414 1K
R97 39K
C272 470P
R95 1K
LPF3 PU61057
LPF
R94 560
R96 1K
C65 0.1
R99 820
R331 10K
C212 0.01
R104 560
C67
R105
R106 560
TP5
R109 1K
C68
C69 47/16
C70 0.01
L12 220
R98 15K
R101 390
R332 10K
R103 560
R107
R108 10K
CN1
1B TRACKING DC (X)
1A TRACKING DC (G)
2/2 S VHS PB
TO CN2-2B VIDEO-1
2B PB C (X)
2A PB C (G)
16B A DUB
PB C
D20 DAP202K
D21
R376 10K
IC10 TC4S30F
IC8 TC4S30F
VDD
VSS
GND3
2/2 D.FF
2/2 SERCH SW
8B PB SYNC (X)
8A PB SYNC (G)
14A EDIT
11 ROT CTL
5B ROT CTL (X)
5A ROT CTL (G)
22B DOC PULSE (X)
22A DOC PULSE (G)
Q28
Q29
Q30
Q31
TP6
C77 47/16
R116 390
R117 22K
C76 0.1
R402 100
R115 1K
C72 0.1
C234 L14
C73 120P
R114 390
R118
R110 150
C74 0.1
R112 100
R119 18K
L13 4.7
R111 680
R113 1K
C75
BR-S800 ONLY


IC3 (1/6)
TC74HC04AF
IC3 (2/6)
IC3 (3/6)
BR-S500 ONLY
IC2
VC2076MP
Q4
Q5
Q6
Q7
Q8
Q9
Q10
CN1
VIDEO EE
12A
SP
14B
CN3
7
2/2
S MODE
10B
VCC
L:SERCH
SERCH
10A
12
S-VHS
YNR NC BAL
LPF1
PU60055
LPF
NL PROCESS
S W/D CLIP1
Q11
DTC124EKT
IC3 (4/6)
SUB EMPHA
IN LEV ADJ
LPF2
PELN0336-01-01
BR-S800 ONLY
TP1
TP2
TP3
TP7
TP8
TP9
TP16
GND2
S CARRI/DEVI1
N CARRI/DEVI1
N CARRI /DEVI2
S W/D CLIP2
S CARRI/DEVI2
IC4
JCP0032
VHS
PB FM
REC FM
IC3 (5/6)
CAR. INT.
F M MOD
W/D CLIP
MAIN EMPHA
N.L.EMPHA /DEEMPHA
YNR
D E
SYNC SEPA
SYNC EXP
N C
V.APT
APT
AGC
AGC DET
DOC DET
D.LIM
F M DET
F M DEMOD
SUB LPF
DEEMPHA MUTE
MAIN DEEMPHA
SUB N C
PB OUT
AGC IN
FM OUT
N W/D CLIP
Q32
Q33
DTA124EKT
Q116
Q34
Q35
Q36
Q37
Q38
Q39
DTC124EKT
Q121
DAP202K
CN2
LPF Y (X)
21B
LPF Y (G)
21A
TO
10 CN2-21B
VIDEO-1
Q115 Q112 Q113 Q114
REC Y
COMB Y
N VIDEO LEV
S VIDEO LEV
LPF4
PELN0409
ENHANCE
18B
Q110
S-VHS PB
13B
REC FM (X)
1
REC FM (G)
2
TO
12 CN6-1
AV PRE/REC
PB FM
CN31
SYNC DOC (X)
13
SYNC DOC (G)
14
Q40
Q41
DTC124EKT
Q42
DTC144WKT
Q107
Q43
E
F
G
H

— DIAGRAM (2/2) —


FROM
1 2 CN6-8
AV PRE/REC
CN3
8 AGC FM(X)
9 AGC FM(G)
1/2 SP
1/2 S VHS PB
1/2 PB FM
1/2 SP
1/2 12V
1/2 5V
1/2 GND
1/2 SC CLOCK
1/2 COMB Y
CN2
20B ΔY(X)
20A ΔY(G)
CN2
5B B/W
1/2 S MODE
TO
1 0 CN2-17B
VIDEO-1
CN2
17B PB Y(X)
17A PB Y(G)
FROM
0 3 CN1-6A
SLOT MOTHER
CN1
20B VITC MIX OUT(X)
20A VITC MIX OUT(G)
1/2 REC Y
BR-S800 ONLY
Q117 Q118 Q45 Q46 Q47 Q48 Q49 Q51
VHS
N RF EQ CH1
N RF EQ CH2
Q54 Q55 Q56 Q57 Q58 Q59 Q60 Q61 Q122
S-VHS
S SP RF EQ CH1
S SP RF EQ CH2
S EP RF EQ
D29
D28
K3
IC5
CXL5509M
Q119 Q120
TP21
TP22
TP23
GND8
AUTO BIAS
PLL
DRIVER
TIMING
CLAMP
CCD (1016 BIT)
BIAS
1H OUT
2H OUT
VSS
VDD
Q62 Q125
LPF
LPF5
PGZ01782
Q103 Q104 Q105 Q69 Q72 Q96 Q73 Q74 Q75
STILL Y ADJ
LPF6
PGZ01782
ΔY ADJ
PB Y COMB2
D14 D15
1SS133
TP18
TP19
Q111
DTC114EKT
TP17
Q85 Q86 Q87 Q88
DL2
PELN0320
DL3
PGZ00131-003
D24
1SS99
D25
TP24
Q89 Q90
2SD601A 2SB709A
Q93
2SD601A
Q91 Q92
REC FQ CH2
REC FQ CH1
TP15
GND7
BR-S800 ONLY
REC Y
1 1 VIDEO 2

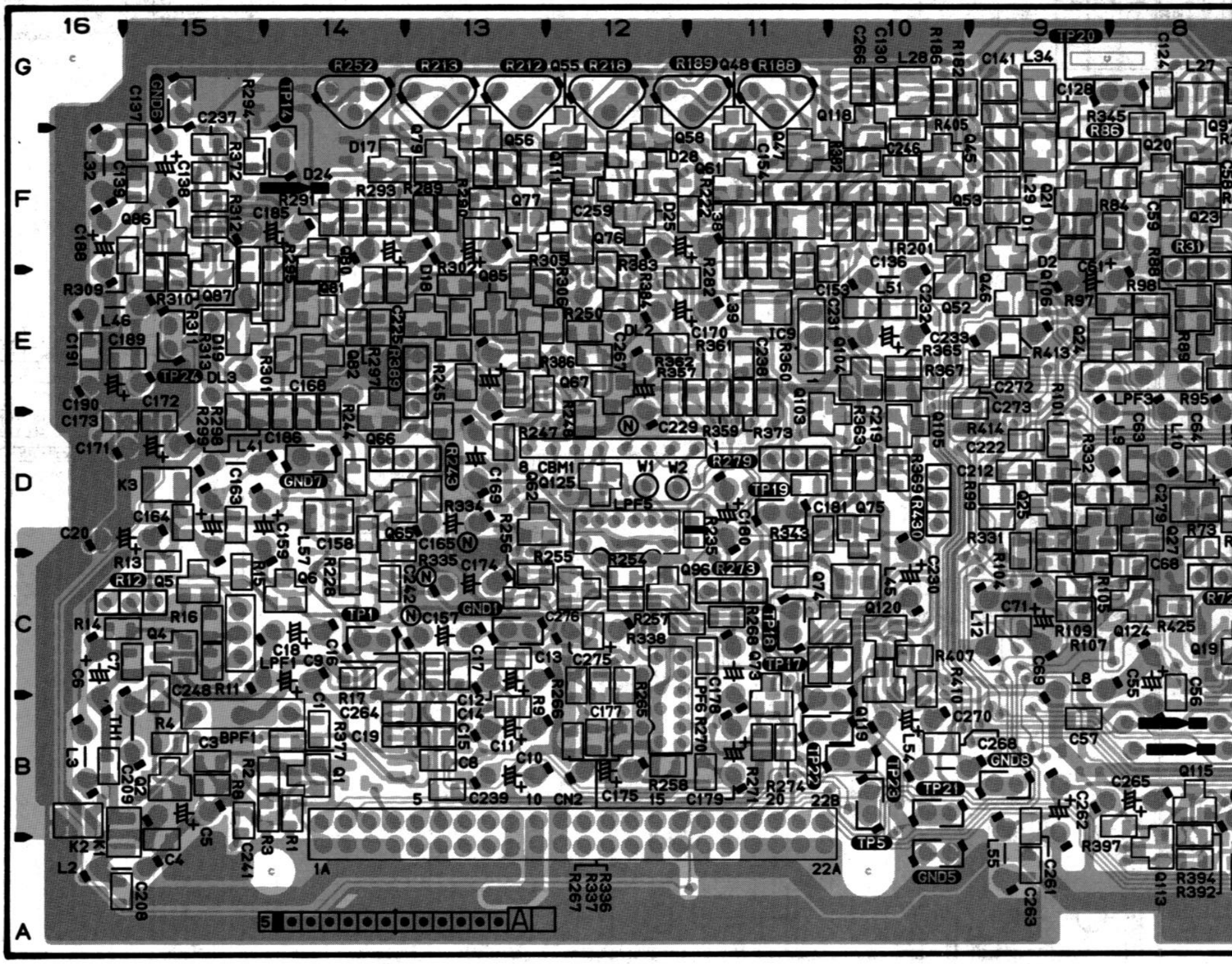

Q52
Q53
R201 1K
R198 39K
R202 5.6K
C136 0.01
C137 0.01
L32 220
C138 47/16
C139 0.01
C133 82P
L31 22
R196 0Ω
C134 12P
C135 0.01
R197 1K
R199 10K
R200 470
PB FM
Q122
R419 1K
IC501
MM1117XF
C501 2.2/16
R503 10K
C503 47/10
C502 2.2/16
R504 10K
C504 4.7/10
R501 1M
R502 1M
C505 0.01
R505 1M
CLAMP
VCC
SL82010
STILL SW PWB
CN1
DRUM FF (X) 9B
DRUM FF (G) 9A
CN3
DRUM FF (X) 5
DRUM FF (G) 6
1/2 D.FF
C222 0.1
CN1
VIDEO REC 13A
IC3 (6/6)
CN3
VIDEO REC 10
GND4
W1
W2
1/2 SERCH SW
1/2 L:SERCH
1/2 SERCH
CRI Y (X) 19B
CRI Y (G) 19A
TO CN2-19B VIDEO-1
L57 100
1/2 VCC
Q125
Q65
Q66
R428 1K
R334 15K
R242 1K
R245 1.2K
R248 390
R386 22K
DL1 TK16071M
Q101
Q102
Q67
R357 39K
R359 2.2K
R361 100
IC9 M5278L09
C171 47/16
C172 0.01
C173 0.01
R429 180
C168 180P
R246 390
C252 100/16
R388 10K
R389 10K
DL TIME ADJ
DL
C229 100/10
R243 1K
PB Y COMB1
R247 1.2K
R362 1.5K
R250 270
C267 120P
R373
C238
C170 100/16
GND5
R335 10K
R244 1K
C169 100/10
R387 22K
R358 22K
C275 47/16
C276 0.01
C253 0.01
C254 0.01
R360 1K
R249 1.2K
TP18
TP19
Q111 DTC114EKT
Q76
Q77
Q78
Q79
Q80
Q81
Q82
Q83
Q84
R383 22K
R283 22K
R289 33K
R291 10K
R292 330
R294 22K
R297 1.8K
R300 270
R251 27K
R301 1K
R303 330
C259 0.022
D17
TP14
R282 560
C182 100/16
R286 330
C184 1/35
C186 15P
D18
R296 56
D19
R299 680
R287 5.6K
GND6
C258 0.022
R384 33K
R281 1.2K
R284 39K
R285 1.5K
C183 0.47/50
R288 1.5K
R290 3.3K
R293 2.2M
R295 3.9K
C185 10/16
R298 470
R302 560
C187 0.01
R252 10K
PB SYNC ADJ
PB Y
C197 0.01
GND7
VIDEO 2

NOTE: UNLESS OTHERWISE SPECIFIED:
ALL NPN TRANSISTORS ARE 2SC2412K
ALL PNP TRANSISTORS ARE 2SA1037K
ALL NPN DIGITAL TRANSISTORS ARE DTC144EKT
ALL PNP DIGITAL TRANSISTORS ARE DTA144EKT
ALL DIODES ARE DAN202K
ALL RESISTANCE VALUES ARE IN OHMS. (1/10W)
ALL INDUCTANCE VALUES ARE IN μH.
ALL CAPACITANCE VALUES ARE IN uF.

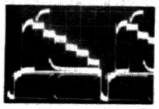
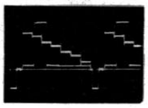
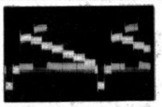
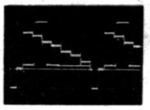
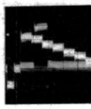
╪	ELECTROLYTIC
╪	NON-POLARIZED
╪	TANTALUM
╫	CERAMIC

4.23 VIDEO-2 CIRCUIT BOARD

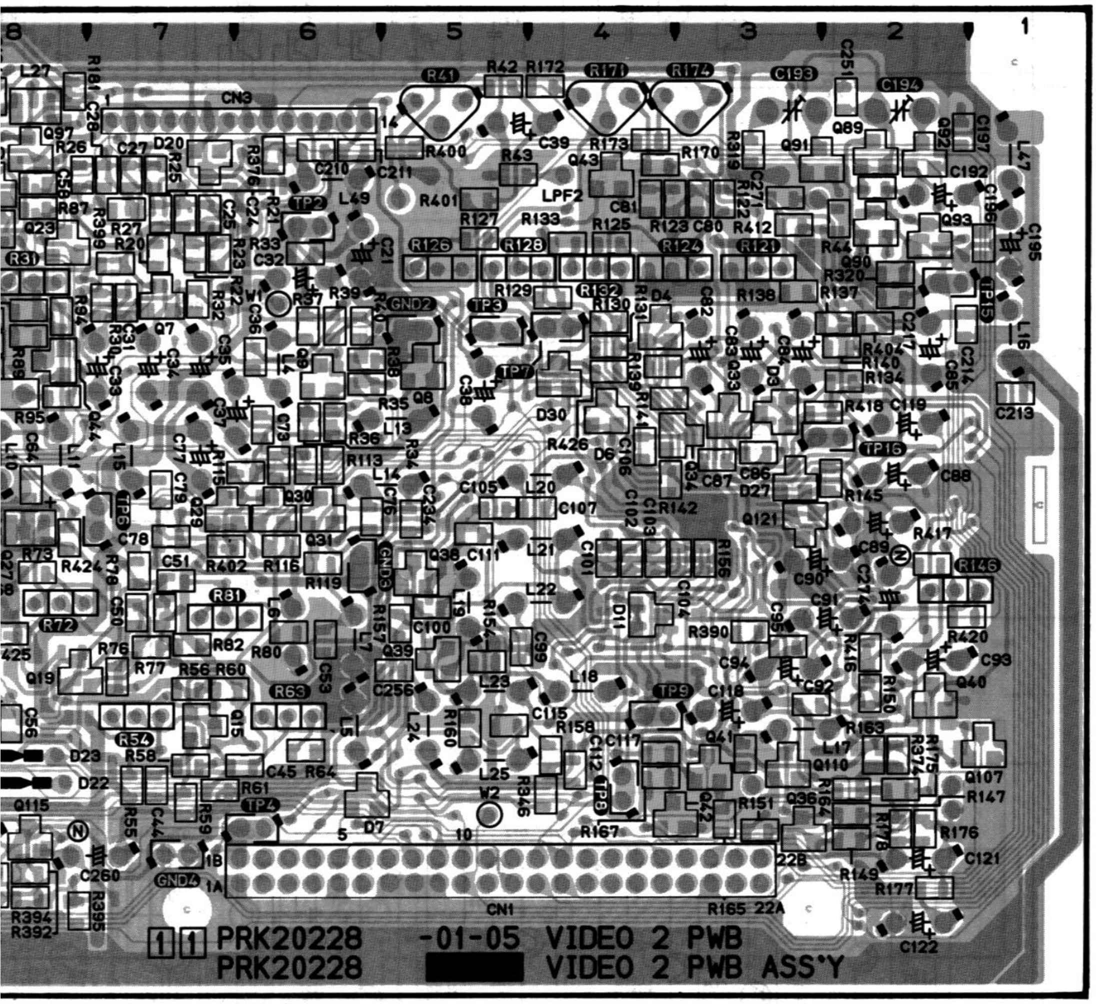
— SOLDER Side


16
15
14
13
12
11
10
9
8
G
F
E
D
C
B
A
CN2
1A
22A
22B
TP1
TP5
TP17
TP18
TP19
TP20
TP21
TP22
TP23
TP24
GND1
GND5
GND6
GND7

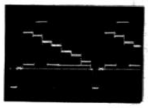
— MAIN WAVE FORMS OF VIDEO-2 CIRCUIT —

TP1			TP2	
				
[REC] 0.4 Vp-p — S-VHS —	[REC] 0.3 Vp-p — VHS —	[PB] 0.4 Vp-p	[REC] 0.4 Vp-p	[PB 0.4 V

Side —

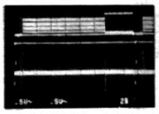

8
7
6
5
4
3
2
1
CN3
CN1
TP2
TP3
TP4
TP6
TP7
TP8
TP9
TP15
TP16
GND2
GND3
GND4
LPF2
PRK20228 -01-05 VIDEO 2 PWB
PRK20228 VIDEO 2 PWB ASS'Y

TP15



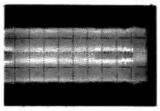
[REC]
0.5 Vp-p

TP16



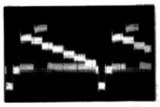
UPPER : TP2
LOWER : TP16

TP20

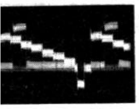


[PB]
0.9 Vp-p

TP24

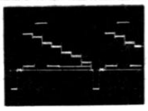


[PB]
2.1 Vp-p

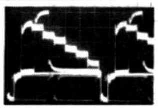


[PB]
0.4 Vp-p

TP3

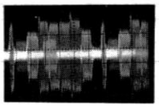


[REC]
0.6 Vp-p



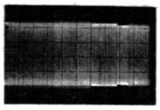
[PB]
0.6 Vp-p

TP5



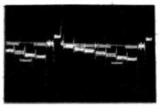
[PB]
150 mV
(Burst level)

TP6

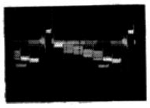


[REC]
760 mVp-p

TP7

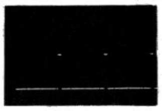


[REC]
1.0 Vp-p
— S-VHS —



[REC]
0.8 Vp-p
— VHS —

TP9



[PB]
4.1 Vp-p
(60 Hz)

— DC Voltage (1/2) —

SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC1	1	2.6	2.6
	2	2.8	2.9
	3	11.1	11.2
	4	3.4	3.4
	5	1.7	1.7
	6	2.4	2.5
	7	0.0	0.0
	8	0.0	0.0
	9	2.6	2.6
	10	1.8	1.9
	11	3.4	3.4
	12	5.1	5.1
	13	5.2	5.2
	14	5.2	5.2
	15	0.0	0.0
	16	1.7	1.7
IC2	1	2.1	2.1
	2	0.0	5.2
	3	3.6	3.6
	4	3.6	3.6
	5	5.2	5.2
	6	2.4	2.3
	7	2.1	2.1
	8	5.2	5.2
	9	1.5	1.5
	10	3.1	3.0
	11	3.1	3.0
	12	3.1	3.0
	13	0.0	0.0
	14	3.0	3.0
	15	3.0	3.0
	16	0.0	2.1
	17	2.2	2.1
	18	2.2	2.1
IC3	1	5.1	0.0
	2	0.0	5.2
	3	0.0	0.0
	4	5.3	5.2
	5	5.3	5.3
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	5.2	5.2
	10	0.0	0.0
	11	4.1	4.1
	12	2.6	2.6
	13	2.4	2.4
	14	5.3	5.3
IC4	1	2.6	2.4
	2	2.5	2.1
	3	3.1	3.1
	4	2.3	2.3
	5	2.2	2.2
	6	2.3	2.6
	7	4.4	3.0
	8	5.0	0.0
	9	3.9	2.2
	10	0.0	0.0
	11	0.0	0.0
	12	3.2	3.2
	13	0.4	0.3
	14	0.0	0.0
	15	0.0	0.0
	16	0.0	2.4
	17	0.5	4.9
	18	5.0	3.7
	19	2.0	2.0
	20	4.1	4.1
	21	0.0	0.1
	22	3.4	3.2
	23	5.0	5.0
	24	2.6	1.6
	25	0.5	0.2
	26	3.3	1.5
	27	3.3	1.0
	28	3.8	3.7
	29	1.7	0.1
	30	2.6	0.1
	31	2.5	0.3
	32	2.5	0.2
	33	1.4	1.4
	34	3.2	3.2
	35	2.6	2.6
	36	5.0	5.0
	37	3.2	3.2
	38	2.8	2.7
	39	2.5	2.5
	40	2.8	2.7
	41	2.1	2.1
	42	3.3	3.4
	43	5.0	5.0
	44	3.3	3.4
IC5	1	1.8	2.1
	2	2.6	2.6
	3	0.0	0.0
	4	1.9	1.6
	5	0.0	0.0
	6	2.0	1.7
	7	0.0	0.0
	8	0.0	0.0
	9	5.1	2.6
	10	2.5	1.9
	11	0.0	3.4
	12	2.1	5.1
	13	2.1	5.2
	14	5.1	5.2
	15	0.8	0.0
	16	0.0	1.7
IC8	1	0.6	0.6
	2	0.0	2.5
	3	0.0	0.0
	4	0.0	2.6
	5	5.3	5.3
IC9	1	8.7	8.7
	2	0.0	0.0
	3	12.0	12.1
TRANSISTOR			
Q1	B	3.3	3.3
	C	5.2	5.2
	E	2.7	2.7
Q2	B	3.4	3.4
	C	5.2	5.2
	E	2.8	2.8
Q3	B	3.9	2.4
	C	0.0	0.0
	E	4.5	3.0
Q4	B	3.4	3.4
	C	2.3	2.3
	E	4.1	4.1
Q5	B	2.3	2.3
	C	3.4	3.3
	E	1.7	1.6
Q6	B	3.4	3.3
	C	5.0	5.0
	E	2.7	2.7
Q7	B	0.8	0.8
	C	0.0	0.0
	E	1.4	1.4
Q8	B	2.0	2.0
	C	0.0	0.0
	E	2.6	2.6
Q9	B	0.0	0.0
	C	0.0	0.5
	E	2.0	2.0
Q10	B	2.6	2.6
	C	3.3	3.3
	E	2.0	1.9
Q11	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q12	B	1.8	1.8
	C	4.1	4.1
	E	1.1	1.1
Q13	B	4.1	4.1
	C	5.2	5.2
	E	0.0	3.4
Q14	B	0.9	0.9
	C	0.0	0.0
	E	1.5	1.5
Q15	B	2.6	2.6
	C	5.2	5.2
	E	2.0	1.9
Q16	B	1.8	1.8
	C	4.1	4.1
	E	1.1	1.1
Q17	B	4.1	3.4
	C	5.2	5.2
	E	3.4	4.1
Q18	B	1.1	1.7
	C	0.0	0.0
	E	1.7	1.1
Q19	B	2.6	2.6
	C	5.2	5.2
	E	2.0	1.9
Q20	B	2.8	2.8
	C	9.3	9.3
	E	2.2	2.2
Q21	B	9.3	9.3
	C	11.8	11.8
	E	8.6	8.7
Q22	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q23	B	9.7	9.8
	C	11.8	11.8
	E	9.1	9.1
Q24	B	3.0	3.0
	C	6.7	6.7
	E	2.4	2.4
Q25	B	4.0	4.0
	C	8.5	8.5
	E	3.4	3.4
Q27	B	3.4	3.4
	C	0.0	0.0
	E	4.1	4.1
Q28	B	2.6	5.2
	C	3.3	0.0
	E	1.9	0.0
Q29	B	7.8	7.8
	C	12.0	12.0
	E	7.2	7.1
Q30	B	11.3	11.3
	C	8.0	7.8
	E	12.0	12.0
Q31	B	5.3	5.3
	C	11.3	11.4
	E	4.8	4.7
Q32	B	1.5	1.5
	C	0.0	0.0
	E	2.2	2.1
Q33	B	5.2	5.2
	C	0.0	0.2
	E	5.2	5.1
Q34	B	2.5	2.6
	C	5.0	5.0
	E	1.9	2.0
Q35	B	1.9	1.8
	C	0.0	0.0
	E	2.5	2.5
Q36	B	2.5	2.5
	C	3.2	3.2
	E	1.9	1.8
Q38	B	2.0	0.0
	C	0.0	0.0
	E	2.6	0.0
Q39	B	0.0	1.9
	C	5.0	3.7
	E	0.0	1.2
Q41	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.4
Q42	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q43	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q44	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q45	B	5.1	5.1
	C	7.4	7.4
	E	4.5	4.5
Q46	B	5.3	5.3
	C	0.0	0.0
	E	0.0	0.0
Q47	B	2.6	2.6
	C	0.0	0.0
	E	0.0	0.0
Q48	B	2.4	2.4
	C	0.0	0.0
	E	0.0	0.0
Q49	B	8.3	8.3
	C	2.9	2.9
	E	8.9	8.9
Q50	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q51	B	8.9	8.9
	C	11.9	11.9
	E	8.3	8.4
Q52	B	2.4	2.4
	C	11.9	11.9
	E	3.4	3.3
Q53	B	4.0	3.9
	C	11.9	11.9
	E	3.4	3.3
Q54	B	5.1	5.1
	C	7.4	7.5
	E	0.0	4.5
Q55	B	2.6	2.6
	C	0.0	0.0
	E	0.0	0.0
Q56	B	2.4	2.4
	C	0.0	0.0
	E	0.0	0.0
Q57	B	4.6	4.6
	C	8.0	8.0
	E	4.0	4.0
Q58	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q59	B	8.0	8.0
	C	3.3	3.3
	E	8.6	8.6
Q60	B	8.7	8.7
	C	2.6	2.6
	E	9.3	9.3

— DC Voltage (2/2) —

SYMBOL	No.	REC	PB
Q61	B	9.3	9.3
	C	11.9	11.9
	E	8.7	8.7
Q62	B	1.7	1.7
	C	6.4	6.4
	E	1.0	1.0
Q65	B	4.3	4.3
	C	5.1	5.1
	E	3.7	3.7
Q66	B	3.7	3.7
	C	0.0	0.0
	E	1.2	4.3
Q67	B	5.8	5.8
	C	8.7	8.7
	E	5.2	5.2
Q69	B	1.7	2.3
	C	8.2	8.2
	E	2.3	1.6
Q72	B	6.0	6.0
	C	11.4	11.4
	E	5.4	5.4
Q73	B	5.9	5.9
	C	6.7	6.7
	E	5.2	5.2
Q74	B	4.0	4.0
	C	11.9	11.9
	E	3.4	3.4
Q75	B	4.0	4.0
	C	11.9	11.9
	E	3.4	3.4
Q76	B	6.9	6.9
	C	11.8	11.8
	E	6.3	6.3
Q77	B	7.4	7.4
	C	11.8	11.8
	E	6.7	6.7
Q78	B	6.7	6.7
	C	11.8	11.8
	E	6.1	6.1
Q79	B	1.1	1.1
	C	0.0	0.0
	E	1.7	1.7
Q80	B	2.2	2.2
	C	11.8	11.8
	E	1.8	2.1
Q81	B	1.8	2.1
	C	10.7	10.6
	E	1.2	1.5
Q82	B	10.7	10.6
	C	2.5	3.1
	E	11.3	11.2
Q83	B	2.5	3.1
	C	11.8	11.8
	E	1.9	2.5
Q84	B	2.3	2.3
	C	7.4	11.8
	E	1.9	2.5
Q85	B	1.3	1.9
	C	0.0	0.0
	E	2.0	1.5
Q86	B	3.3	3.3
	C	11.0	11.0
	E	2.7	2.7
Q87	B	11.0	11.0
	C	7.8	7.8
	E	11.6	11.6

SYMBOL	No.	REC	PB
Q88	B	7.8	7.8
	C	11.8	11.8
	E	0.0	7.2
Q89	B	4.1	4.1
	C	8.6	8.6
	E	3.5	3.5
Q90	B	8.6	8.6
	C	2.8	2.8
	E	9.2	9.2
Q91	B	2.4	2.4
	C	0.3	0.0
	E	0.0	0.0
Q92	B	2.6	2.6
	C	0.3	0.0
	E	0.0	0.0
Q93	B	2.8	2.8
	C	12.0	12.0
	E	2.2	2.2
Q96	B	5.4	5.4
	C	0.0	0.0
	E	6.0	6.0
Q97	B	9.3	9.3
	C	0.0	0.0
	E	9.9	9.8
Q101	B	3.2	3.2
	C	7.9	7.9
	E	2.6	2.6
Q102	B	7.9	0.0
	C	5.8	5.8
	E	8.5	8.5
Q103	B	4.3	4.3
	C	10.9	10.9
	E	3.7	3.7
Q104	B	10.9	10.9
	C	6.9	6.9
	E	11.6	11.6
Q105	B	6.9	6.3
	C	11.9	11.9
	E	6.3	6.9
Q106	B	5.1	0.0
	C	0.0	0.0
	E	0.0	0.0
Q107	B	5.3	5.3
	C	0.0	0.0
	E	0.0	0.0
Q110	B	5.3	5.3
	C	0.0	0.0
	E	0.0	0.0
Q111	B	0.3	0.3
	C	0.0	0.0
	E	0.0	0.0
Q112	B	4.8	5.0
	C	11.0	11.0
	E	4.2	4.5
Q113	B	11.0	11.0
	C	5.4	5.7
	E	11.6	11.6
Q114	B	5.4	5.7
	C	12.0	12.0
	E	4.8	5.0
Q115	B	4.8	4.8
	C	12.0	12.0
	E	4.8	4.9
Q116	B	0.2	0.2
	C	2.5	2.5
	E	0.0	0.0

SYMBOL	No.	REC	PB
Q117	B	5.3	5.3
	C	0.1	0.0
	E	0.0	0.0
Q118	B	0.1	0.0
	C	11.9	11.9
	E	11.9	11.9
Q119	B	2.3	2.3
	C	5.1	5.1
	E	1.7	1.7
Q120	B	0.1	0.0
	C	5.1	5.1
	E	1.7	1.7
Q121	B	2.3	2.3
	C	0.0	0.0
	E	2.6	2.6
Q122	B	·	·
	C	·	·
	E	·	·
CONNECTOR			
CN1	1A	0.0	0.0
	1B	0.0	0.0
	2A	0.0	—
	2B	0.0	—
	3A	0.0	—
	3B	0.0	—
	4A	0.0	2.8
	4B	0.2	2.8
	5A	0.0	0.0
	5B	0.1	2.6
	6A	0.0	0.0
	6B	4.0	4.1
	7A	0.0	0.0
	7B	0.2	0.2
	8A	0.0	0.0
	8B	0.5	0.5
	9A	0.0	0.0
	9B	2.4	2.4
	10A	5.2	5.2
	10B	5.2	5.2
	11A	0.0	0.0
	11B	0.0	0.0
	12A	5.1	5.1
	12B	5.2	5.2
	13A	5.1	0.0
	13B	4.1	4.1
	14A	5.3	1.9
	14B	5.3	5.3
	15A	1.5	1.9
	15B	1.3	2.2
	16A	1.4	1.9
	16B	1.4	1.9
	17A	0.0	1.9
	17B	0.6	1.9
	18A	5.3	5.3
	18B	5.3	5.3
	19A	0.0	1.6
	19B	—	1.9
	20A	0.0	0.0
	20B	6.9	6.9
	21A	—	1.9
	21B	—	2.0
	22A	0.0	1.9
	22B	0.0	2.0
CN2	1A	0.0	0.0
	1B	2.9	2.9
	2A	0.0	0.0
	2B	4.8	4.1
	3A	0.0	0.0
	3B	2.7	2.7
	4A	0.0	0.0
	4B	3.9	3.9
	5A	1.2	2.9
	5B	0.4	0.4
	6A	0.0	0.0
	6B	1.4	1.4
	7A	0.0	0.0
	7B	1.5	0.3
	8A	1.3	1.3
	8B	1.2	1.5
	9A	5.3	5.3
	9B	5.3	5.3

SYMBOL	No.	REC	PB
	10A	12.1	12.1
	10B	12.1	12.1
	11A	0.0	0.0
	11B	0.0	0.0
	12A	5.2	5.2
	12B	5.2	5.2
	13A	12.9	12.9
	13B	12.9	12.9
	14A	0.0	0.0
	14B	0.0	0.0
	15A	0.0	0.0
	15B	1.8	1.7
	16A	1.0	1.3
	16B	0.0	0.0
	17A	0.0	0.0
	17B	7.2	7.2
	18A	—	1.2
	18B	—	1.1
	19A	0.0	0.0
	19B	4.3	4.3
	20A	0.0	0.0
	20B	2.8	2.8
	21A	0.0	0.0
	21B	1.9	2.0
	22A	0.0	0.0
	22B	0.0	0.0
CN3	1	0.0	0.0
	2	0.0	0.0
	3	—	1.3
	4	0.0	0.0
	5	2.4	2.4
	6	0.0	0.0
	7	0.0	0.0
	8	3.2	1.9
	9	0.0	0.0
	10	5.1	0.0
	11	—	2.5
	12	5.2	5.2
	13	0.8	0.8
	14	0.0	0.0

6

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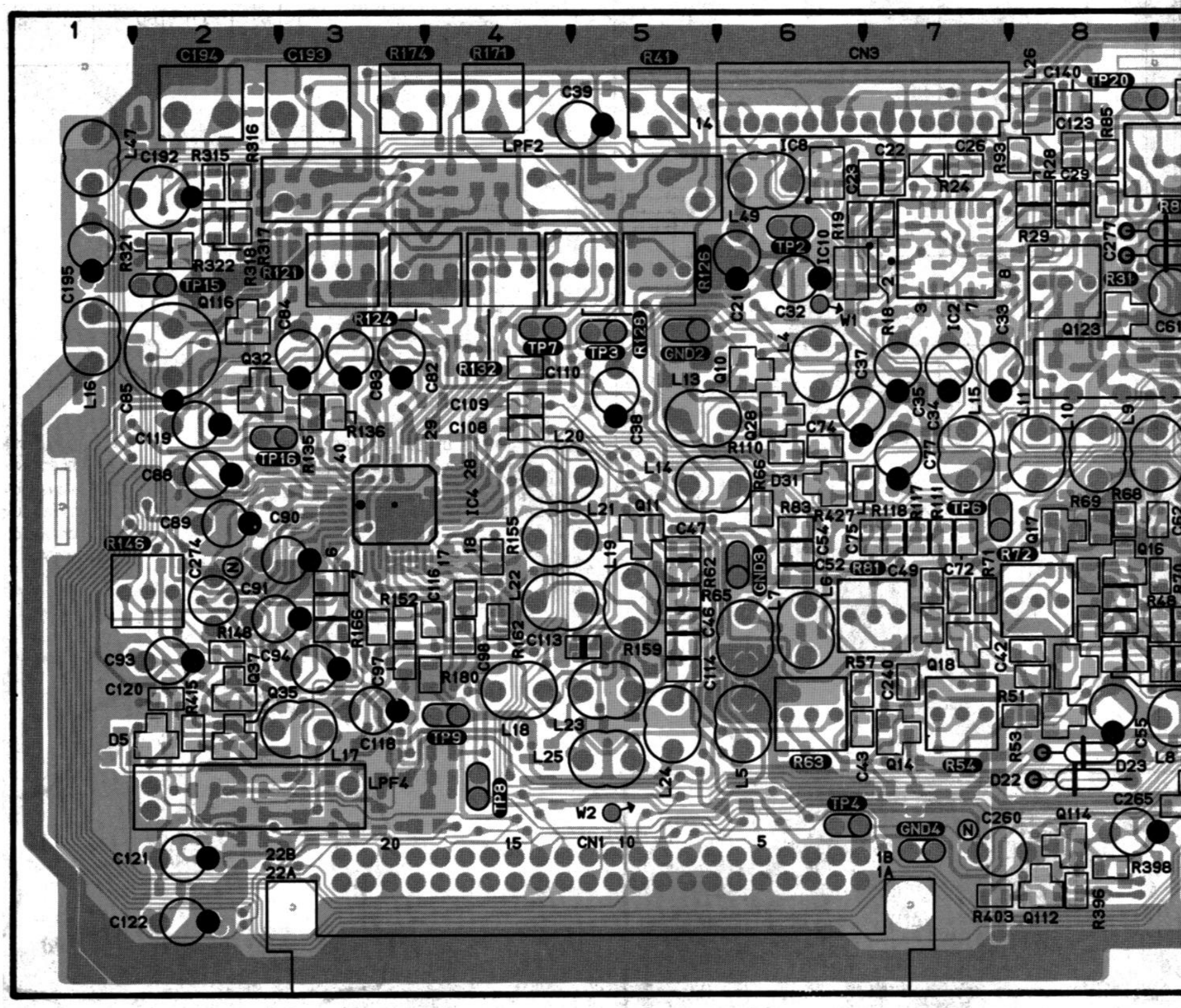
1

— PARTS S



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C194
C193
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R171
R41
CN3
L26
C140
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C123
R85
C39
14
LPF2
L47
C192
R315
R316
IC8
C22
C26
R93
R28
C29
R24
C23
L49
R19
IC10
TP2
R29
C277
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R322
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R318
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C195
TP15
Q116
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C21
C32
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R18
IC2
C33
R31
Q123
C61
R124
C84
TP7
TP3
R129
GND2
Q10
L4
C37
C35
C34
L15
L11
L10
L9
L16
C85
Q32
C83
C82
R132
C110
L13
C38
C109
C108
R136
R135
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29
28
C119
TP16
L20
Q28
R110
C74
C77
C86
IC4
R66
D31
L14
R83
R427
R118
R117
R111
TP6
R69
R68
Q17
C62
C89
C90
L21
Q11
C47
C54
C75
R146
C274
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R155
L19
R62
GND3
C52
R81
C49
C72
R71
R72
Q16
C91
C116
L22
R65
C46
L6
R48
R148
R166
R152
C113
C112
C93
C94
C97
C98
R162
R180
R159
R57
C240
Q18
C42
C120
R415
Q37
Q35
L18
L23
R51
C55
D5
C118
TP9
L25
L24
L5
C43
Q14
R54
R53
D23
L8
L17
LPF4
TP8
R63
D22
C121
22B
22A
20
15
W2
CN1
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C122
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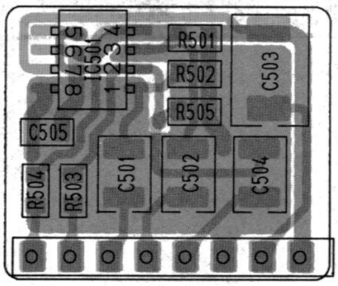
Q112
R396

— STILL SW —



5678
IC501
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R502
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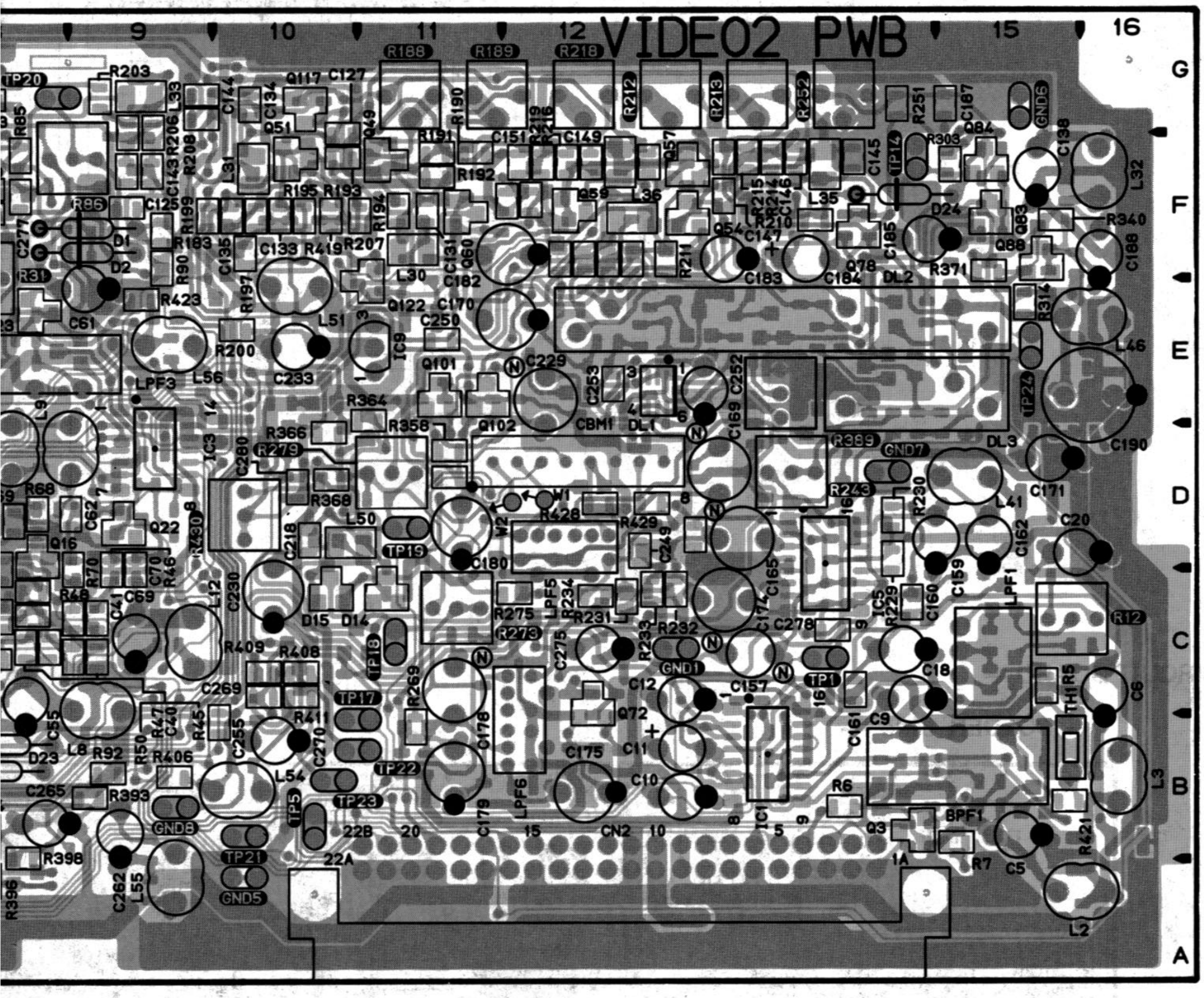
C503
C505
R504
R503
C501
C502
C504

A

B

C

ARTS Side —


VIDEO2 PWB
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11
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15
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G
F
E
D
C
B
A
TP20
R203
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C134
Q117
C127
R188
R189
R218
R212
R213
R252
R251
C187
GND6
C138
L32
Q51
Q49
R190
R219
R216
C151
C149
Q57
R191
R192
C143
R206
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R208
L31
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R194
R215
R214
C146
R210
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C147
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C145
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Q83
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R86
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C185
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C188
C277
D1
D2
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C133
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C182
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DL2
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C170
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R358
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LPF5
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R273
R233
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C174
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IC5
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LPF1
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GND1
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TP1
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R408
C269
R269
C275
Q72
C12
C11
C161
C9
R5
TH1
C6
C55
R47
C40
R45
C255
R411
C270
TP17
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LPF6
D23
L8
R92
R50
R406
L54
TP22
C175
C10
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R6
BPF1
L3
C265
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GND8
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TP5
C179
CN2
Q3
R7
C5
R421
R398
C262
L55
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GND5
22B
22A
20
15
10
8
5
9
1A
L2
R396

E

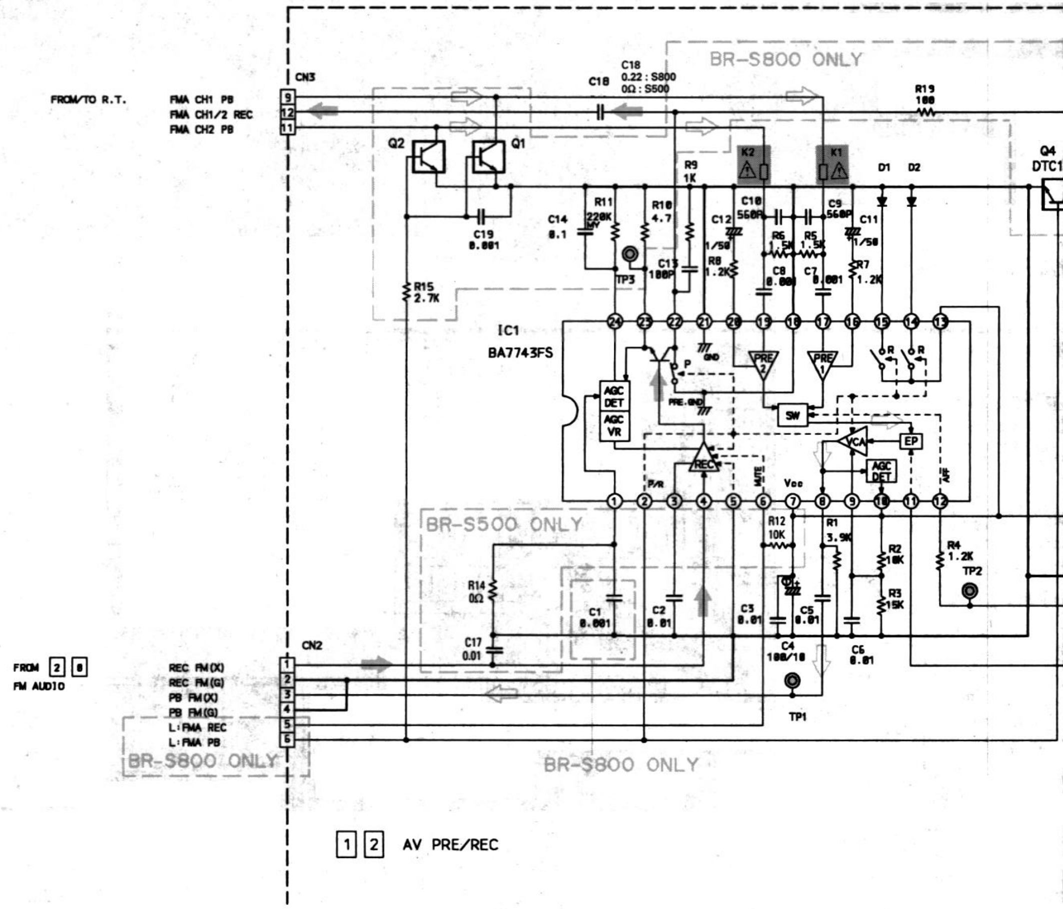
F

G

H

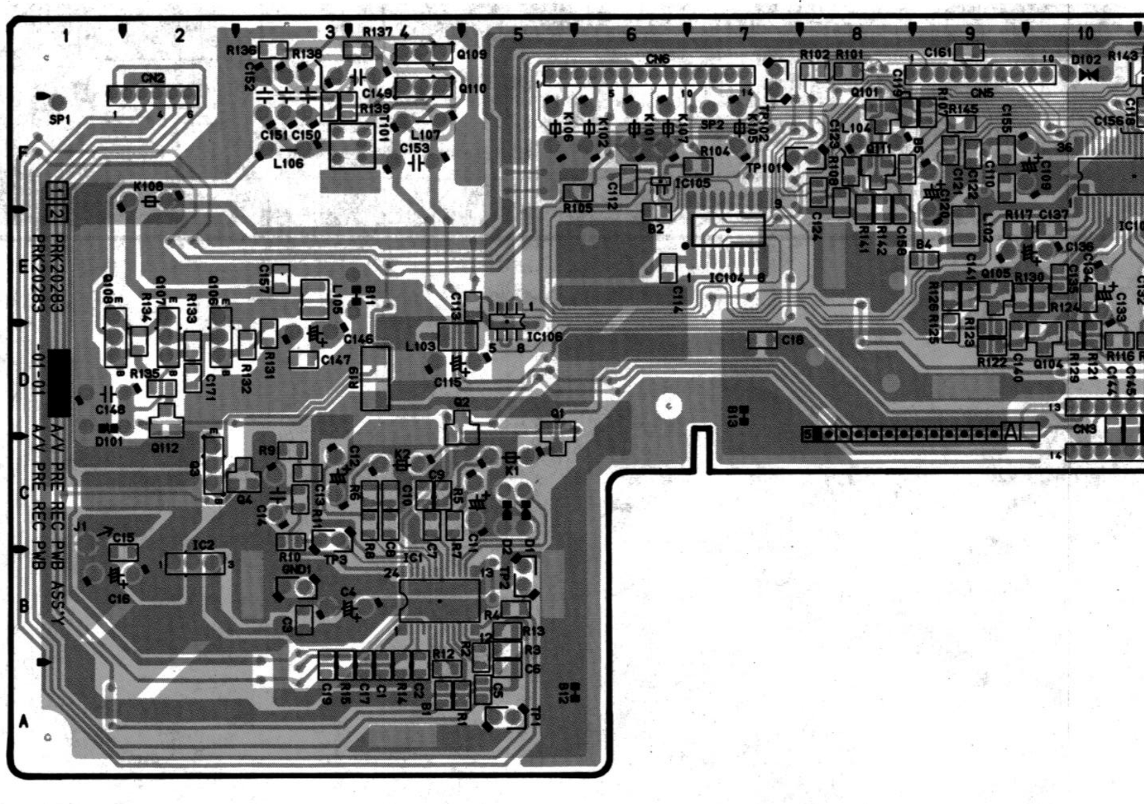
4.24 AV PRE/REC SCHEMATIC DIAGRAM AND CIRCUIT BOARD

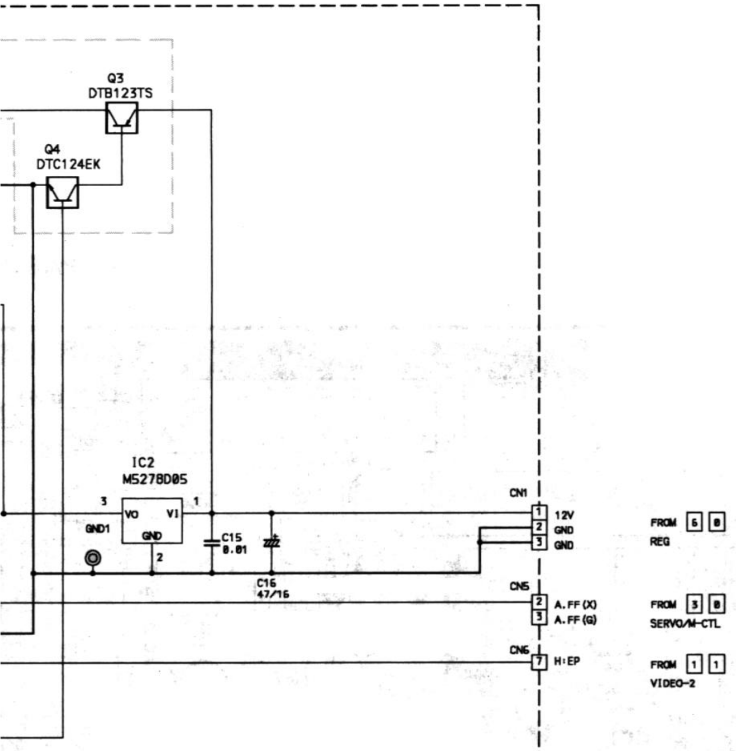
— DIAGRAM (1/2) —


FROM/TO R.T.
FMA CH1 PB
FMA CH1/2 REC
FMA CH2 PB
CN3
C18
C18 0.22 : S800 0Ω : S500
BR-S800 ONLY
R19 100
Q2
Q1
Q4 DTC1
K2
K1
D1
D2
R9 1K
R11 220K
R10 4.7
C14 0.1
C19 0.001
TP3
C13 100P
C12 1/50
C10 560P
C9 560P
C11 1/50
R6 1.5K
R5 1.5K
R8 1.2K
C8 0.001
C7 0.001
R7 1.2K
R15 2.7K
IC1
BA7743FS
AGC DET
AGC VR
GND
PRE.GND
PRE 2
PRE 1
SW
VCA
EP
AGC DET
REC
P/R
MUTE
Vcc
BR-S500 ONLY
R12 10K
R1 3.9K
R2 10K
R3 15K
R4 1.2K
TP2
R14 0Ω
C1 0.001
C2 0.01
C3 0.01
C5 0.01
C4 100/10
C6 0.01
C17 0.01
CN2
FROM 2 8 FM AUDIO
REC FM(X)
REC FM(G)
PB FM(X)
PB FM(G)
L:FMA REC
L:FMA PB
BR-S800 ONLY
TP1
1 2 AV PRE/REC

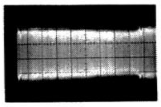
— CIRCUIT BOARD —

— SOLDER Side —


1 2 PRK20283 PRK20283 -01-01
A/V PRE REC PWB
A/V PRE REC PWB ASS'Y
CN2
CN6
CN5
CN3
IC1
IC2
IC104
IC105
IC106
Q1
Q2
Q4
Q101
Q104
Q105
Q106
Q107
Q108
Q109
Q110
Q111
Q112
SP1
SP2
TP1
TP2
TP3
TP101
TP102
GND1
J1
D101
D102
A B C D E F


Q3
DTB123TS
Q4
DTC124EK
IC2
M5278D05
VO
VI
GND
GND1
C15
0.01
C16
47/16
CN1
1 12V
2 GND
3 GND
CN5
2 A.FF(X)
3 A.FF(G)
CN6
7 H:EP
FROM 6 8
REG
FROM 3 8
SERVO/M-CTL
FROM 1 1
VIDEO-2

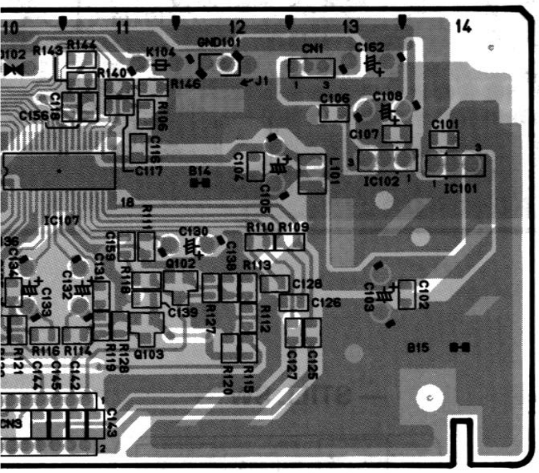
— MAIN WAVEFORMS OF AV PRE/REC CIRCUIT —

TP101	TP102
	
[PB] 150 mVp-p	4.5 Vp-p (30 Hz)

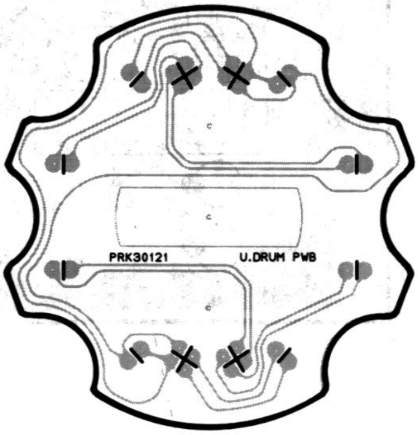
NOTE:UNLESS OTHERWISE SPECIFIED:

ALL NPN DIGITAL TRANSISTORS ARE DTC323TK
ALL DIODES ARE 1SS136
ALL RESISTANCE VALUES ARE IN OHMS. (1/10W)
ALL INDUCTANCE VALUES ARE IN µH.

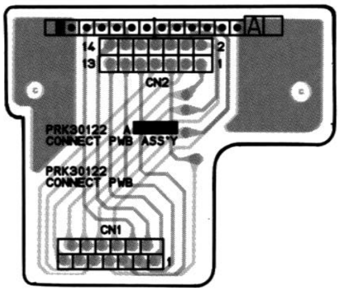
ALL CAPACITANCE VALUES ARE IN uF.
ELECTROLYTIC
NON-POLARIZED
TANTALUM
CERAMIC
MYLAR


10
11
12
13
14
GND101
CN1
C162
R143
R144
K104
R140
R146
J1
C106
C108
C156
C116
R106
C118
C107
C101
C117
B14
C104
L101
IC102
IC101
C105
18
IC107
R111
C130
R110
R109
C159
R118
Q102
C138
R113
C128
C126
C103
C102
C134
C133
C132
C131
C139
R127
R112
R121
R116
R114
R119
R128
Q103
R120
R115
C127
C125
B15
C145
C142
CN3
C143

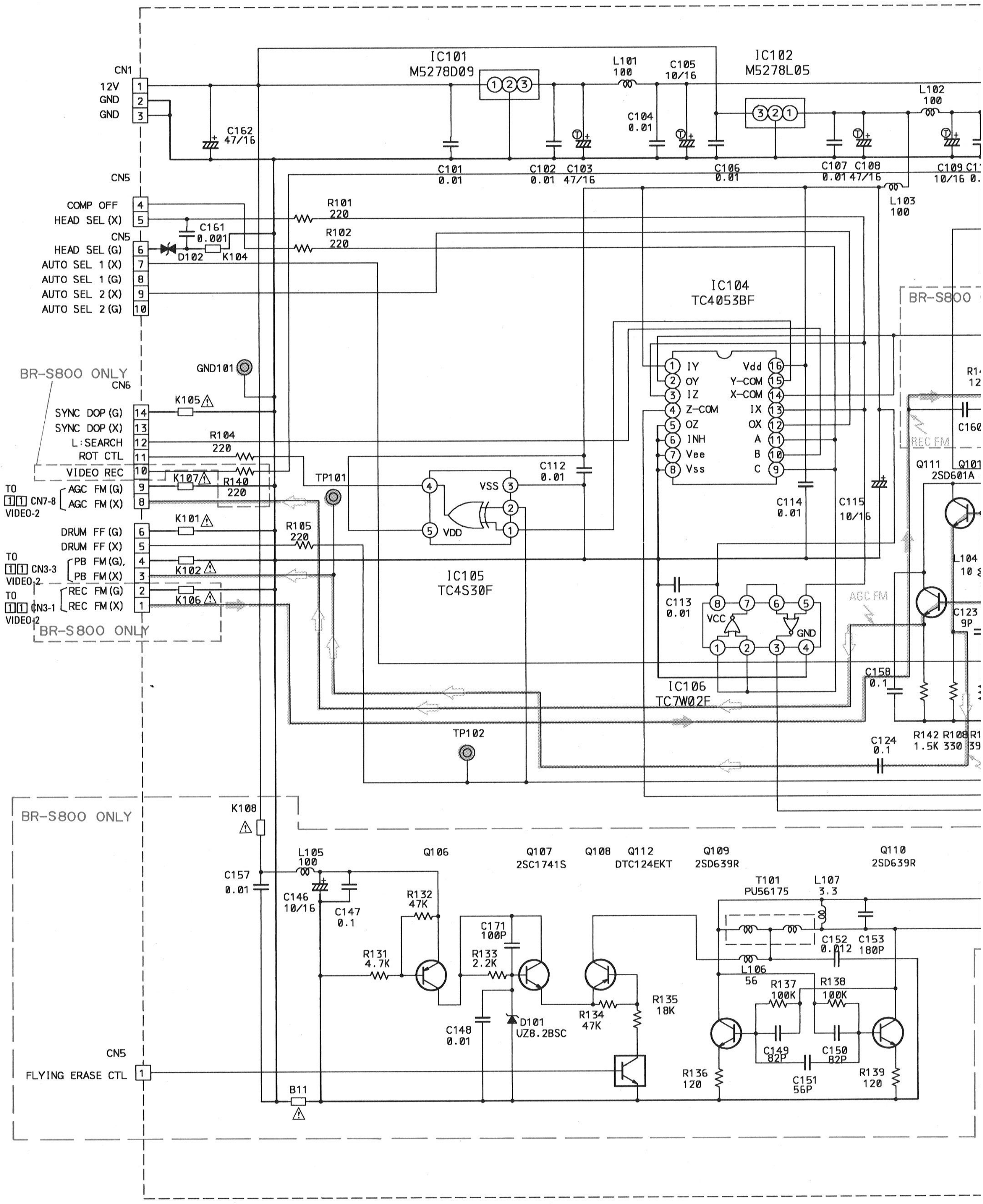
— DRUM —


PRK30121
U.DRUM PWB

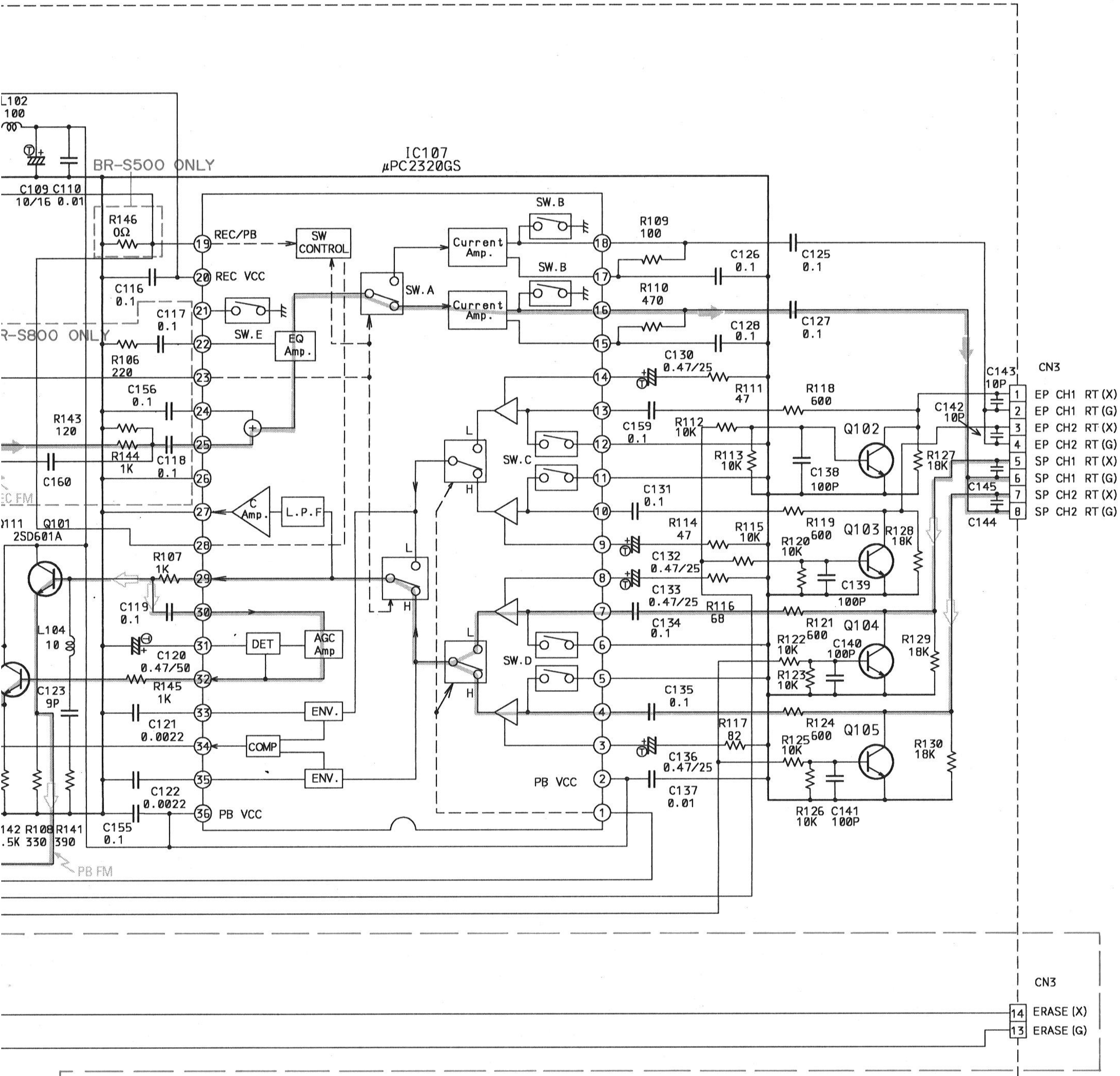
— CONNECTOR —


AI
14
2
13
1
CN2
PRK30122 A
CONNECT PWB ASS'Y
PRK30122
CONNECT PWB
CN1
1

— DIAGRAM (2/2) —



CN1
12V
GND
GND
C162 47/16
IC101 M5278D09
L101 100
C105 10/16
C104 0.01
IC102 M5278L05
L102 100
C101 0.01
C102 0.01
C103 47/16
C106 0.01
C107 0.01
C108 47/16
C109 10/16
L103 100
CN5
COMP OFF
HEAD SEL (X)
CN5
HEAD SEL (G)
AUTO SEL 1 (X)
AUTO SEL 1 (G)
AUTO SEL 2 (X)
AUTO SEL 2 (G)
C161 0.001
D102
K104
R101 220
R102 220
IC104 TC4053BF
1 IY
2 OY
3 IZ
4 Z-COM
5 OZ
6 INH
7 Vee
8 Vss
16 Vdd
15 Y-COM
14 X-COM
13 IX
12 OX
11 A
10 B
9 C
BR-S800 ONLY
CN6
GND101
SYNC DOP (G)
SYNC DOP (X)
L:SEARCH
ROT CTL
VIDEO REC
K105
R104 220
TO 11 CN7-8 VIDEO-2
AGC FM (G)
AGC FM (X)
K107
R140 220
TP101
C112 0.01
IC105 TC4S30F
VSS
VDD
DRUM FF (G)
DRUM FF (X)
K101
R105 220
TO 11 CN3-3 VIDEO-2
PB FM (G)
PB FM (X)
K102
TO 11 CN3-1 VIDEO-2
REC FM (G)
REC FM (X)
K106
BR-S800 ONLY
C113 0.01
C114 0.01
C115 10/16
VCC
GND
IC106 TC7W02F
BR-S800
REC FM
AGC FM
Q111 Q101
2SD601A
L104 10
C123 9P
C158 0.1
R142 1.5K
R108 330
C124 0.1
TP102
BR-S800 ONLY
K108
L105 100
C157 0.01
C146 10/16
C147 0.1
Q106
Q107 2SC1741S
Q108 Q112 DTC124EKT
Q109 2SD639R
Q110 2SD639R
T101 PU56175
L107 3.3
R132 47K
C171 100P
R131 4.7K
R133 2.2K
C152 0.012
C153 180P
L106 56
R137 100K
R138 100K
R135 18K
R134 47K
C148 0.01
D101 UZ8.2BSC
CN5
FLYING ERASE CTL
C149 82P
C150 82P
R136 120
C151 56P
R139 120
B11
6
5
4
3
2
1
A
B
C


L102
100
C109 C110
10/16 0.01
BR-S500 ONLY
R146
0Ω
IC107
µPC2320GS
REC/PB
SW CONTROL
Current Amp.
SW.B
SW.A
REC VCC
C116
0.1
C117
0.1
R-S800 ONLY
SW.E
EQ Amp.
R106
220
C156
0.1
R143
120
R144
1K
C118
0.1
C160
REC FM
C Amp.
L.P.F
Q101
2SD601A
R107
1K
C119
0.1
L104
10
DET
AGC Amp
C120
0.47/50
R145
1K
C123
9P
C121
0.0022
COMP
ENV.
C122
0.0022
PB VCC
R142 R108 R141
.5K 330 390
C155
0.1
PB FM
R109
100
R110
470
C126
0.1
C125
0.1
C128
0.1
C127
0.1
C130
0.47/25
R111
47
C143
10P
CN3
R118
600
C159
0.1
R112
10K
C142
10P
Q102
SW.C
R113
10K
C138
100P
R127
18K
C145
C144
C131
0.1
R114
47
R115
10K
R119
600
Q103
R128
18K
R120
10K
C132
0.47/25
C139
100P
C133
0.47/25
R116
68
R121
600
Q104
C134
0.1
R122
10K
C140
100P
R129
18K
SW.D
R123
10K
C135
0.1
R117
82
R124
600
Q105
R125
10K
R130
18K
C136
0.47/25
C137
0.01
R126 C141
10K 100P
L
H
1 EP CH1 RT(X)
2 EP CH1 RT(G)
3 EP CH2 RT(X)
4 EP CH2 RT(G)
5 SP CH1 RT(X)
6 SP CH1 RT(G)
7 SP CH2 RT(X)
8 SP CH2 RT(G)
CN3
14 ERASE (X)
13 ERASE (G)

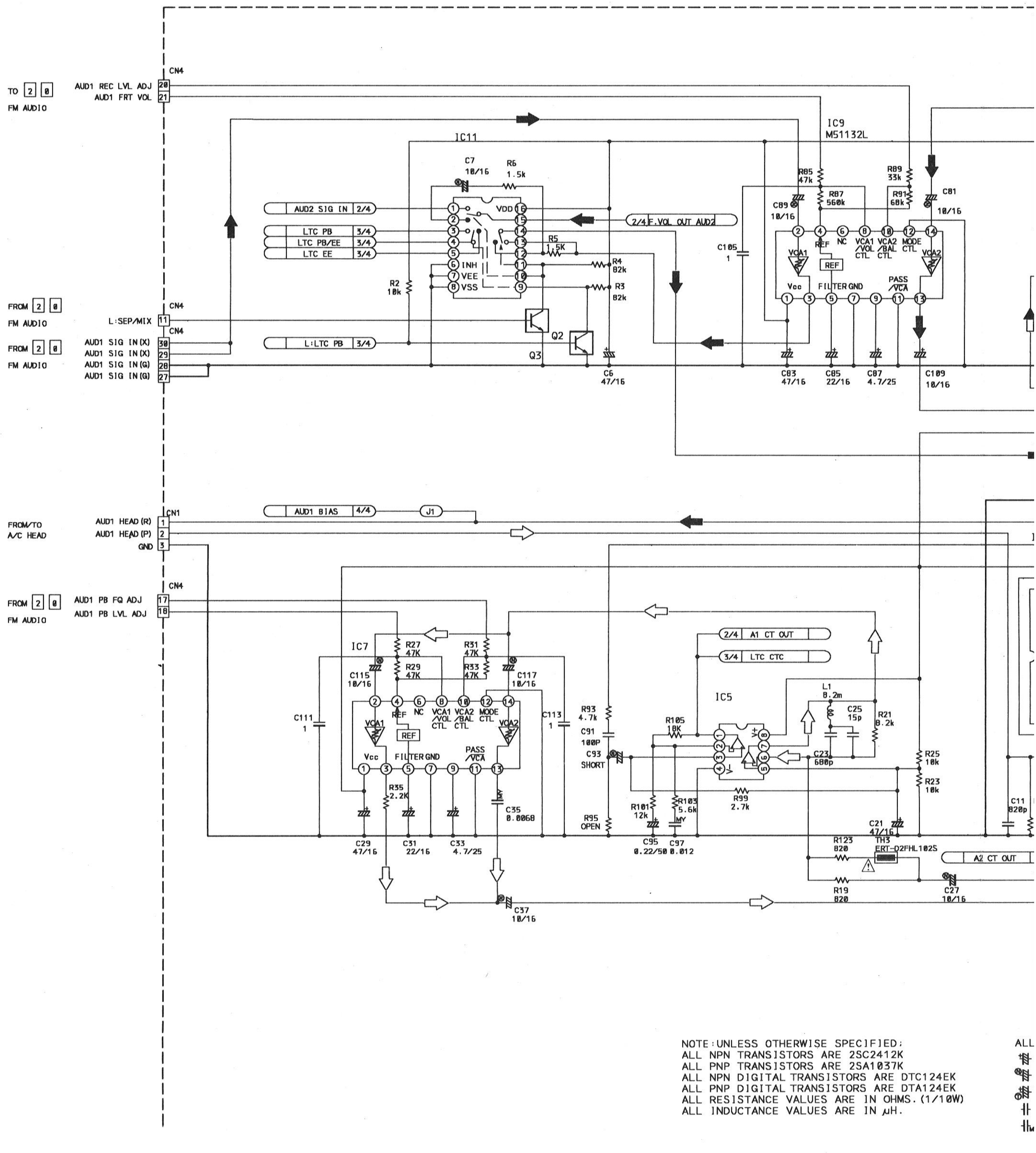
NOTE: UNLESS OTHERWISE SPECIFIED;
ALL NPN TRANSISTORS ARE 2SC3110
ALL PNP TRANSISTORS ARE 2SA933S
ALL RESISTANCE VALUES ARE IN OHMS. (1/10W)
ALL INDUCTANCE VALUES ARE IN µH.
ALL CAPACITANCE VALUES ARE IN uF.

⊥	ELECTROLYTIC
Ⓣ	TANTALUM
‖	CERAMIC

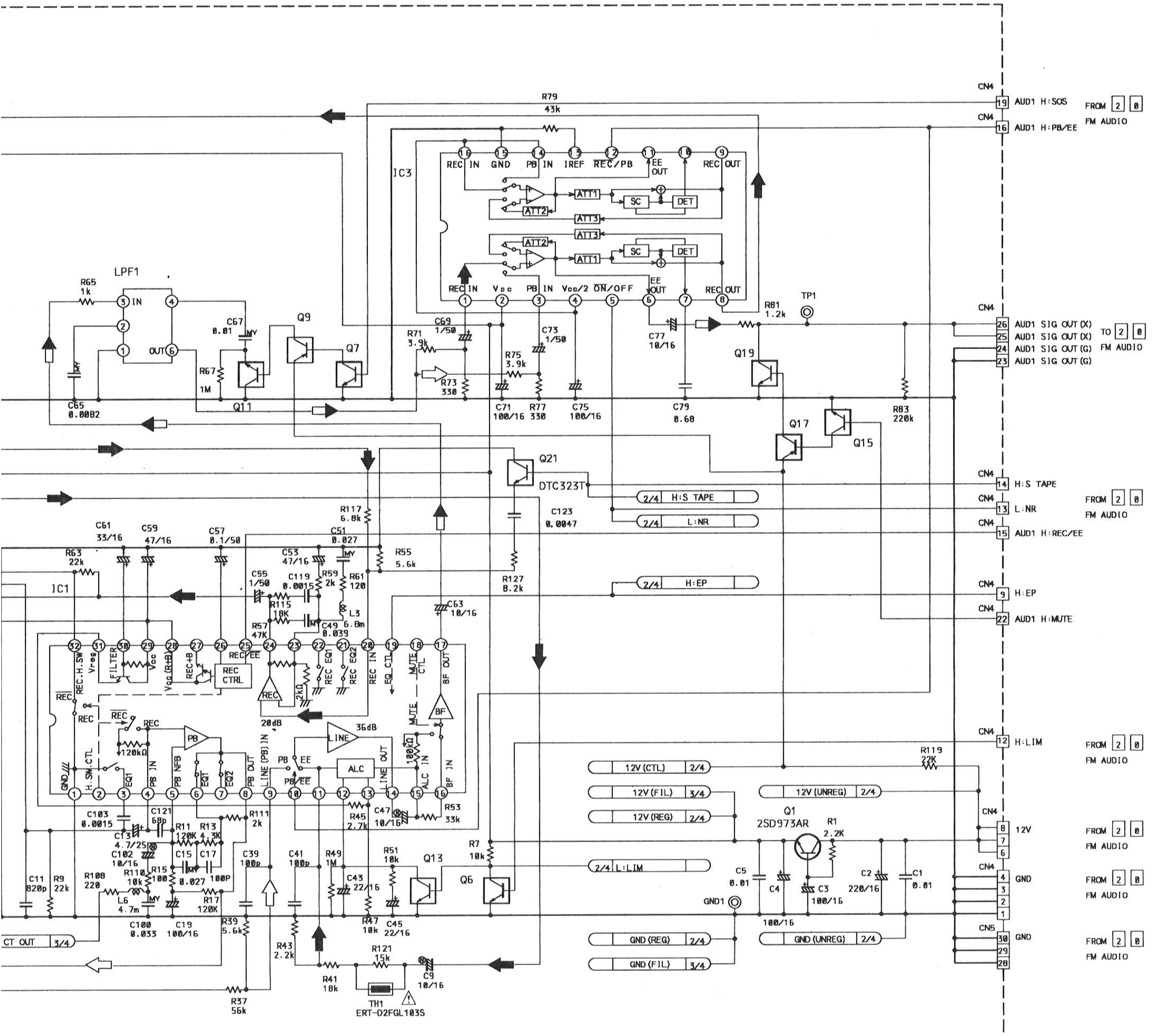
1 2 A/V PRE REC

4.25 NORMAL AUDIO SCHEMATIC DIAGRAM (BR-S800)

— DIAGRAM (1/4) —


TO 2 0 FM AUDIO
AUD1 REC LVL ADJ 20
AUD1 FRT VOL 21
CN4
IC11
IC9
M51132L
C7 10/16
R6 1.5k
AUD2 SIG IN 2/4
LTC PB 3/4
LTC PB/EE 3/4
LTC EE 3/4
VDD
INH
VEE
VSS
R5 1.5K
R4 82k
R3 82k
R2 10k
2/4 F.VOL OUT AUD2
R85 47k
R87 560k
R89 33k
R91 68k
C89 10/16
C81 10/16
C105 1
REF
NC
VCA1 /VOL CTL
VCA2 /BAL CTL
MODE CTL
VCA1
VCA2
Vcc
FILTER GND
PASS /VCA
FROM 2 0 FM AUDIO
L:SEP/MIX 11
FROM 2 0 FM AUDIO
AUD1 SIG IN(X) 30
AUD1 SIG IN(X) 29
AUD1 SIG IN(G) 28
AUD1 SIG IN(G) 27
L:LTC PB 3/4
Q2
Q3
C6 47/16
C83 47/16
C85 22/16
C87 4.7/25
C109 10/16
AUD1 BIAS 4/4
J1
FROM/TO A/C HEAD
AUD1 HEAD (R) 1
AUD1 HEAD (P) 2
GND 3
CN1
FROM 2 0 FM AUDIO
AUD1 PB FQ ADJ 17
AUD1 PB LVL ADJ 18
IC7
R27 47K
R29 47K
R31 47K
R33 47K
C115 10/16
C117 10/16
C111 1
C113 1
R35 2.2K
C35 0.0068
C29 47/16
C31 22/16
C33 4.7/25
C37 10/16
2/4 A1 CT OUT
3/4 LTC CTC
IC5
L1 8.2m
C25 15p
R21 8.2k
R93 4.7k
C91 100P
C93 SHORT
R105 10K
C23 680p
R25 10k
R23 10k
R101 12k
R103 5.6k
R99 2.7k
R95 OPEN
C95 0.22/50
C97 0.012
C21 47/16
R123 820
TH3 ERT-D2FHL102S
R19 820
C27 10/16
A2 CT OUT
C11 820p
ALL

NOTE: UNLESS OTHERWISE SPECIFIED;
ALL NPN TRANSISTORS ARE 2SC2412K
ALL PNP TRANSISTORS ARE 2SA1037K
ALL NPN DIGITAL TRANSISTORS ARE DTC124EK
ALL PNP DIGITAL TRANSISTORS ARE DTA124EK
ALL RESISTANCE VALUES ARE IN OHMS. (1/10W)
ALL INDUCTANCE VALUES ARE IN μH.


R79
43k
CN4
19 AUD1 H:SOS
CN4
16 AUD1 H:PB/EE
FROM 2 0
FM AUDIO
IC3
16 REC IN
15 GND
14 PB IN
13 IREF
12 REC/PB
11 EE OUT
10
9 REC OUT
ATT1
ATT2
ATT3
SC
DET
1 REC IN
2 Vcc
3 PB IN
4 Vcc/2
5 ON/OFF
6 EE OUT
7
8 REC OUT
LPF1
R65
1k
3 IN
4
2
1
OUT 6
C65
0.0082
R67
1M
C67
0.01
Q9
Q7
Q11
R71
3.9k
C69
1/50
C73
1/50
R75
3.9k
R73
330
C71
100/16
R77
330
C75
100/16
C77
10/16
C79
0.68
R81
1.2k
TP1
Q19
R83
220k
Q17
Q15
CN4
26 AUD1 SIG OUT (X)
25 AUD1 SIG OUT (X)
24 AUD1 SIG OUT (G)
23 AUD1 SIG OUT (G)
TO 2 0
FM AUDIO
Q21
DTC323T
C123
0.0047
2/4 H:S TAPE
2/4 L:NR
CN4
14 H:S TAPE
CN4
13 L:NR
CN4
15 AUD1 H:REC/EE
FROM 2 0
FM AUDIO
R117
6.8k
R55
5.6k
R127
8.2k
2/4 H:EP
CN4
9 H:EP
CN4
22 AUD1 H:MUTE
C61
33/16
C59
47/16
C57
0.1/50
C51
0.027
R63
22k
C53
47/16
C55
1/50
C119
0.0015
R59
2k
R61
120
R115
10K
L3
6.8m
C49
0.039
R57
47K
C63
10/16
IC1
32 REC.H.SW
31 Vreg
30 FILTER
29 Vcc
28 Vcc (R+B)
27 REC+B
26
25 REC/EE
24
23
22 REC EQ1
21 REC EQ2
20 REC IN
19 EQ CTL
18 MUTE CTL
17 BF OUT
REC CTRL
REC
20dB
2kΩ
REC
REC
REC
REC
120kΩ
PB
LINE
36dB
MUTE
BF
100kΩ
PB
EE
PB/EE
ALC
GND
1
2 H.SW.CTL
3 EQ1
4 PB IN
5 PB NFB
6 EQT
7 EQ2
8 PB OUT
9 LINE (PB) IN
10
11
12
13 LINE OUT
14
15 ALC IN
16 BF IN
C103
0.0015
C121
68p
C13
4.7/25
C102
10/16
R11
120K
R13
4.3K
R111
2k
C15
C17
R110
10k
R15
100
0.027
100P
L6
4.7m
R17
120K
C100
0.033
C19
100/16
C11
820p
R9
22k
R108
220
C39
100p
C41
100p
R49
1M
C43
22/16
R45
2.7k
C47
10/16
R53
33k
R51
10k
R47
10k
C45
22/16
Q13
Q6
R7
10k
R39
5.6k
R43
2.2k
R41
10k
R121
15k
C9
10/16
TH1
ERT-D2FGL103S
R37
56k
CT OUT 3/4
CN4
12 H:LIM
FROM 2 0
FM AUDIO
R119
22K
12V (CTL) 2/4
12V (FIL) 3/4
12V (REG) 2/4
12V (UNREG) 2/4
Q1
2SD973AR
R1
2.2K
CN4
8 12V
7
6
FROM 2 0
FM AUDIO
2/4 L:LIM
C5
0.01
C4
C3
100/16
C2
220/16
C1
0.01
GND1
100/16
CN4
4 GND
3
2
1
FROM 2 0
FM AUDIO
GND (REG) 2/4
GND (UNREG) 2/4
GND (FIL) 3/4
CN5
30 GND
29
28
FROM 2 0
FM AUDIO

ALL CAPACITANCE VALUES ARE IN uF.

ELECTROLYTIC

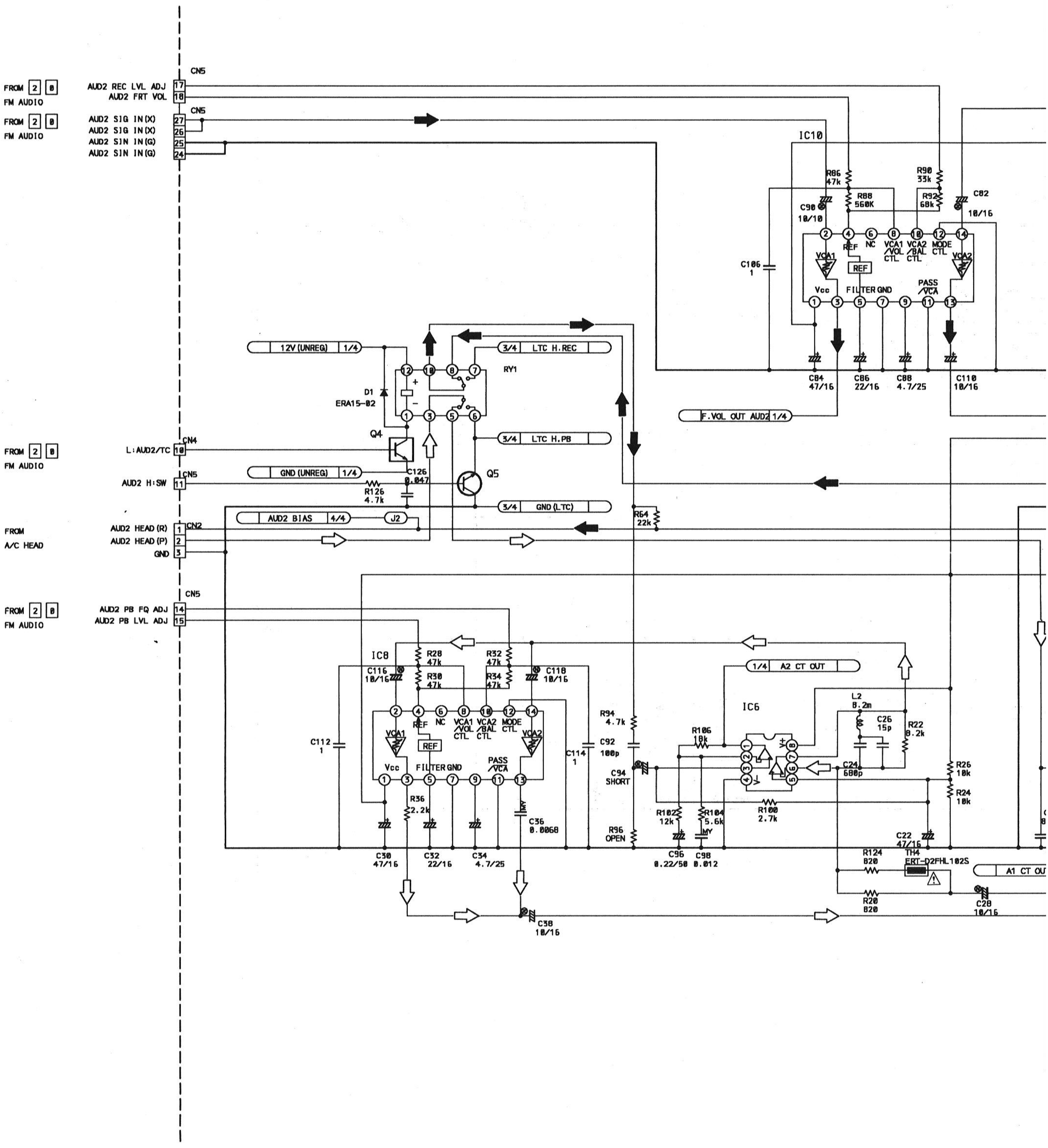
NON-POLARIZED

TANTALUM

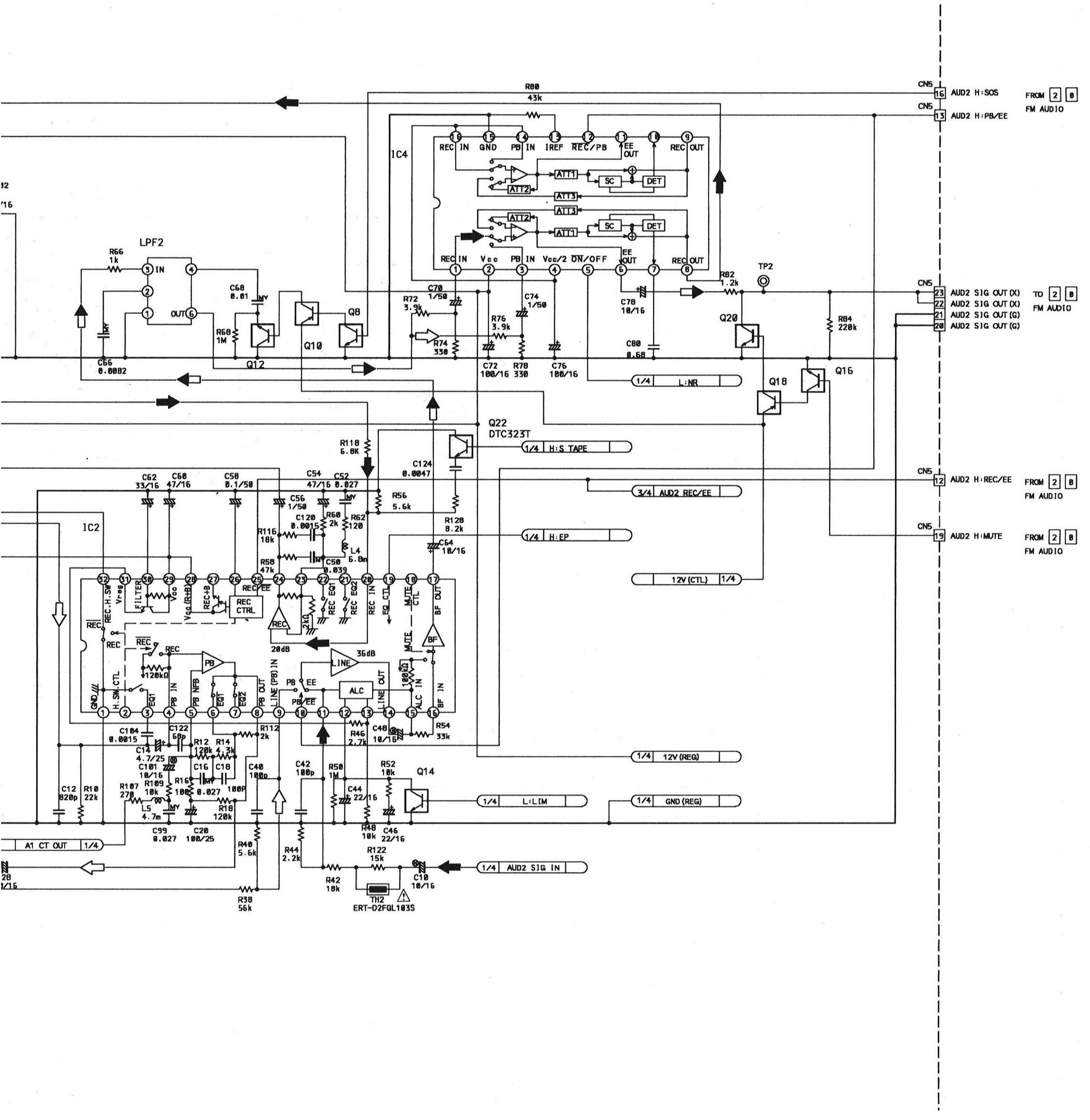
CERAMIC

MYLAR

— DIAGRAM (2/4) —



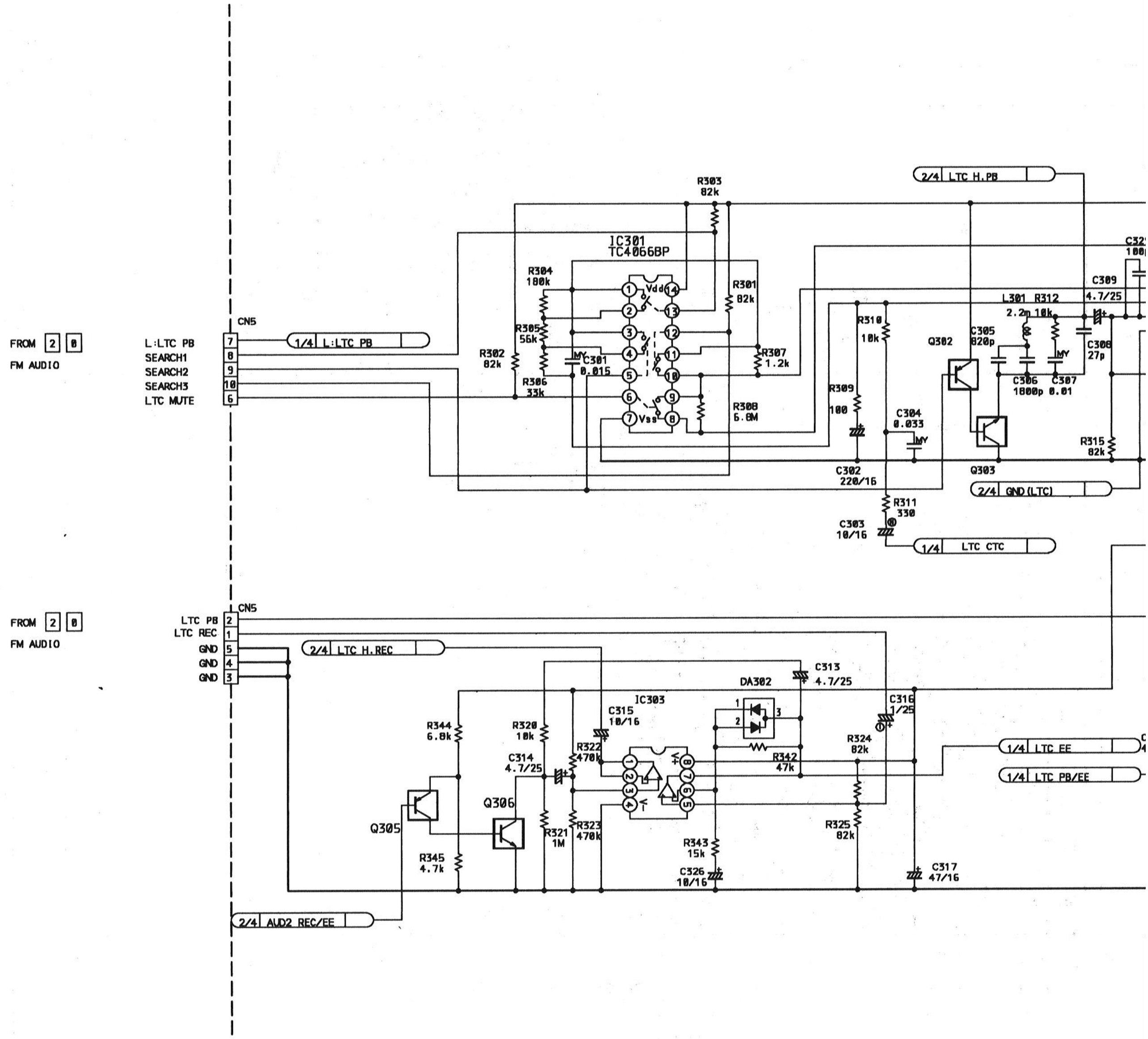
6
5
4
3
2
1
A
B
C
FROM 2 0 FM AUDIO
AUD2 REC LVL ADJ 17
AUD2 FRT VOL 18
CN5
AUD2 SIG IN(X) 27
AUD2 SIG IN(X) 26
AUD2 SIN IN(G) 25
AUD2 SIN IN(G) 24
L:AUD2/TC 10
CN4
AUD2 H:SW 11
FROM A/C HEAD
AUD2 HEAD (R) 1
AUD2 HEAD (P) 2
GND 3
CN2
AUD2 PB FQ ADJ 14
AUD2 PB LVL ADJ 15
IC10
R86 47k
R88 560K
R90 33k
R92 68k
C90 10/10
C82 10/16
C106 1
REF
NC
VCA1 /VOL CTL
VCA2 /BAL CTL
MODE CTL
VCA1
VCA2
Vcc
FILTER GND
PASS /VCA
C84 47/16
C86 22/16
C88 4.7/25
C110 10/16
12V (UNREG) 1/4
3/4 LTC H.REC
RY1
D1 ERA15-02
Q4
Q5
F.VOL OUT AUD2 1/4
3/4 LTC H.PB
GND (UNREG) 1/4
C126 0.047
R126 4.7k
3/4 GND (LTC)
AUD2 BIAS 4/4
J2
R64 22k
IC8
R28 47k
R30 47k
R32 47k
R34 47k
C116 10/16
C118 10/16
C112 1
C114 1
R36 2.2k
C36 0.0068
C30 47/16
C32 22/16
C34 4.7/25
C38 10/16
R94 4.7k
C92 100p
C94 SHORT
R96 OPEN
1/4 A2 CT OUT
IC6
R106 10k
R102 12k
R104 5.6k
MY
R100 2.7k
C96 0.22/50
C98 0.012
L2 8.2m
C26 15p
R22 8.2k
C24 680p
R26 10k
R24 10k
C22 47/16
R124 820
R20 820
TH4 ERT-D2FHL102S
C28 10/16
A1 CT OU

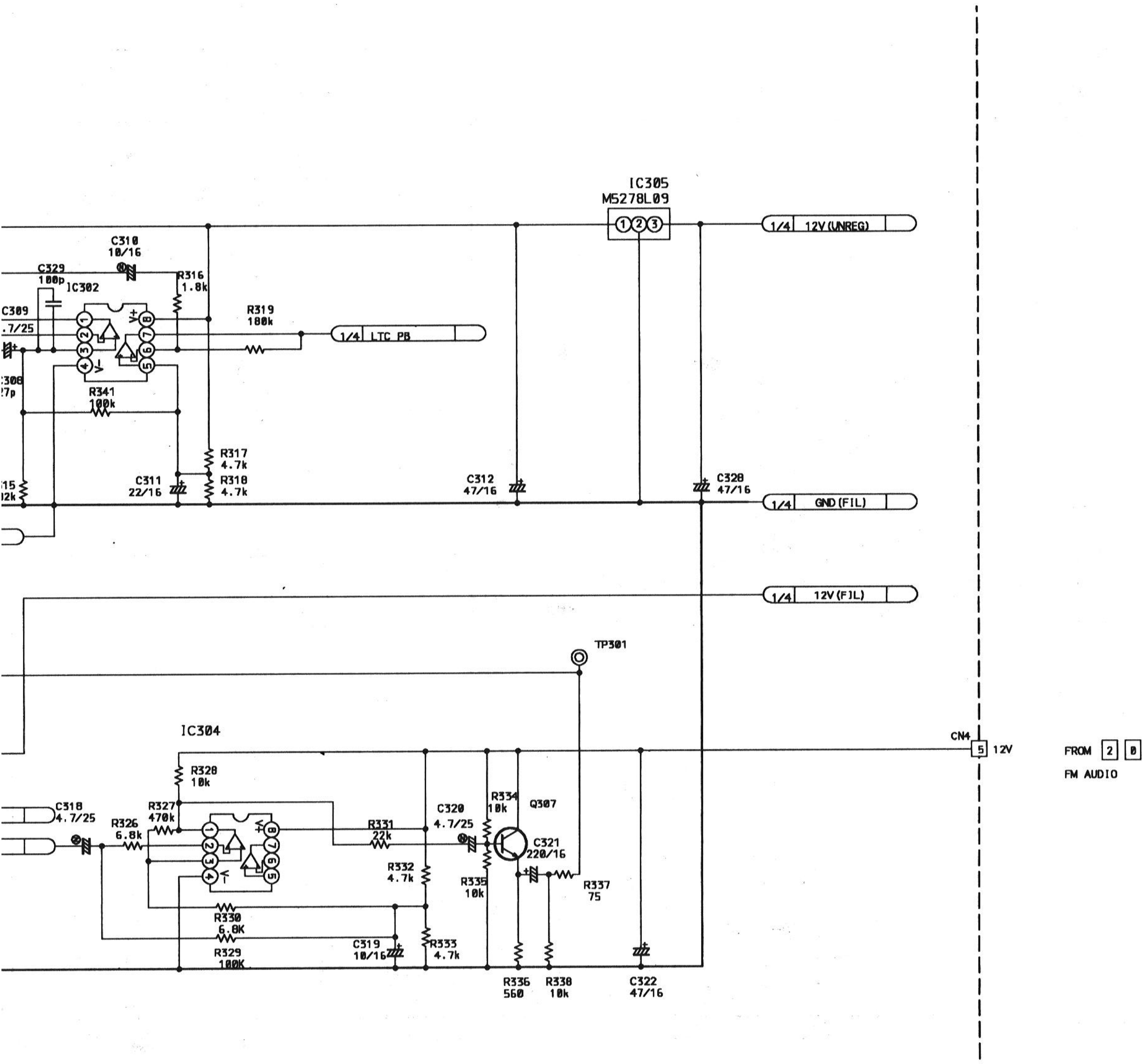


R80
43k
CN5
16 AUD2 H:SOS
CN5
13 AUD2 H:PB/EE
FROM 2 0
FM AUDIO
IC4
16 REC IN
15 GND
14 PB IN
13 IREF
12 REC/PB
11 EE OUT
10
9 REC OUT
ATT1
ATT2
ATT3
SC
DET
1 REC IN
2 Vcc
3 PB IN
4 Vcc/2
5 ON/OFF
6 EE OUT
7
8 REC OUT
LPF2
R66
1k
5 IN
4
2
1
OUT 6
C66
0.0082
C68
0.01
MY
R68
1M
Q12
Q10
Q8
C70
1/50
R72
3.9k
C74
1/50
R76
3.9k
R74
330
C72
100/16
R78
330
C76
100/16
C78
10/16
C80
0.68
R82
1.2k
TP2
Q20
R84
220k
CN5
23 AUD2 SIG OUT (X)
22 AUD2 SIG OUT (X)
21 AUD2 SIG OUT (G)
20 AUD2 SIG OUT (G)
TO 2 0
FM AUDIO
1/4 L:NR
Q18
Q16
Q22
DTC323T
1/4 H:S TAPE
R118
6.8K
C124
0.0047
CN5
12 AUD2 H:REC/EE
FROM 2 0
FM AUDIO
3/4 AUD2 REC/EE
C62
33/16
C60
47/16
C58
0.1/50
C54
47/16
C52
0.027
MY
C56
1/50
R56
5.6k
R128
8.2k
CN5
19 AUD2 H:MUTE
FROM 2 0
FM AUDIO
IC2
R116
10k
C120
0.0015
R60
2k
R62
120
L4
6.8m
R58
47k
C50
0.039
1/4 H:EP
C64
10/16
12V (CTL) 1/4
32 REC.H.SW
31 Vreg
30 FILTER
29 Vcc
28 Vcc (R+B)
27 REC+B
26
25 REC/EE
24
23
22 REC EQ1
21 REC EQ2
20 REC IN
19 EQ CTL
18 MUTE CTL
17 BF OUT
REC CTRL
REC
20dB
REC
120kΩ
REC
REC
PB
36dB
LINE
MUTE
BF
100kΩ
PB
EE
PB/EE
ALC
H.SW.CTL
GND
1
2
3 EQ1
4 PB IN
5 PB NFB
6 EQT
7 EQ2
8 PB OUT
9 LINE (PB) IN
10
11
12
13 LINE OUT
14
15 ALC IN
16 BF IN
C104
0.0015
C122
68p
R112
2k
C14
4.7/25
R12
120k
R14
4.3k
R46
2.7k
C48
10/16
R54
33k
1/4 12V (REG)
C101
10/16
C16
C18
C40
100p
C42
100p
R50
1M
R52
10k
Q14
C12
820p
R10
22k
R107
270
R109
10k
R16
100
0.027
100P
MY
C44
22/16
L5
4.7m
R18
120k
1/4 L:LIM
1/4 GND (REG)
C99
0.027
C20
100/25
R48
10k
C46
22/16
A1 CT OUT 1/4
R40
5.6k
R44
2.2k
R122
15k
1/4 AUD2 SIG IN
C10
10/16
R42
10k
TH2
ERT-D2FGL103S
R38
56k
28
1/16
32
/16

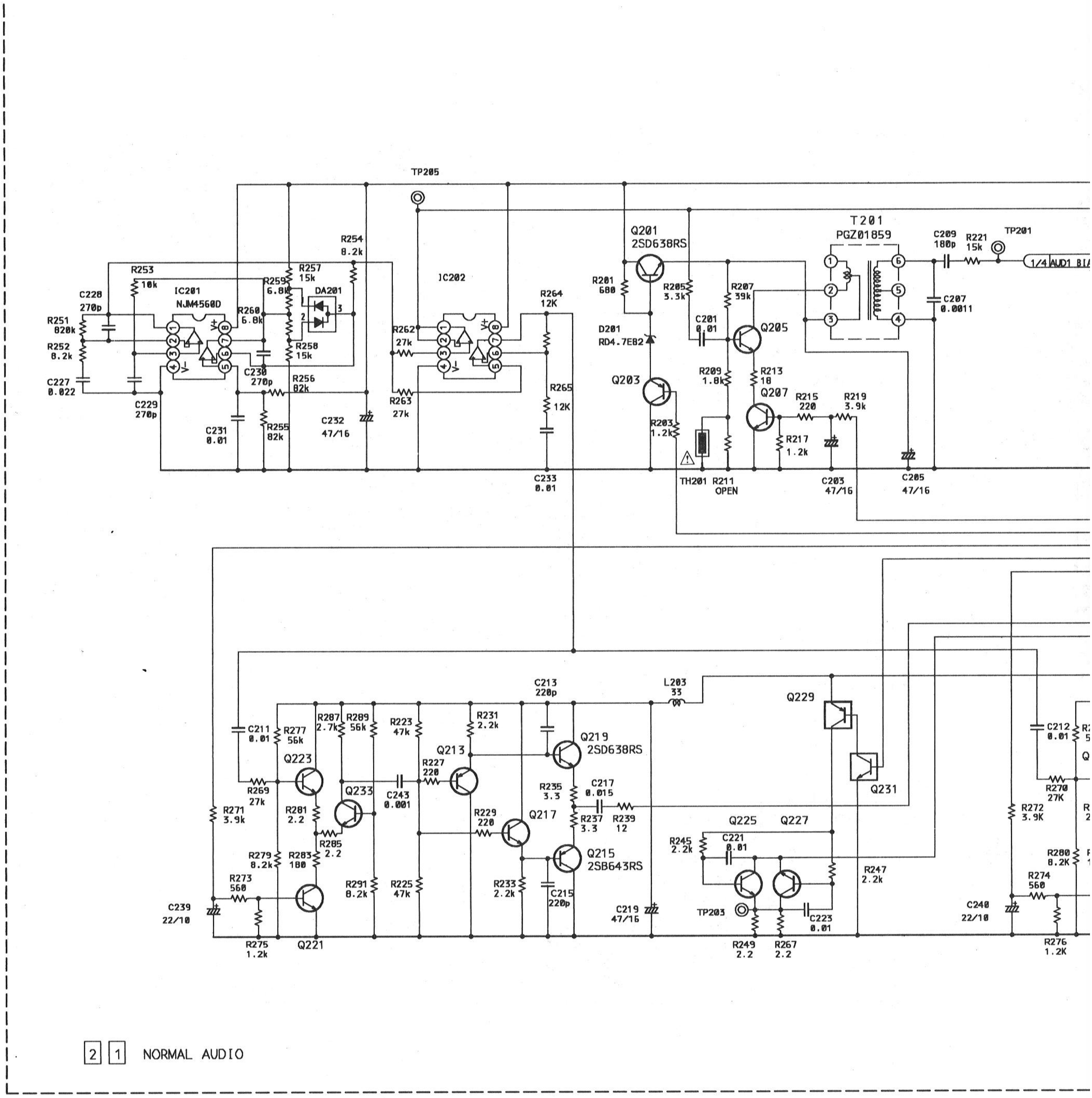
E F G H

— DIAGRAM (3/4) —

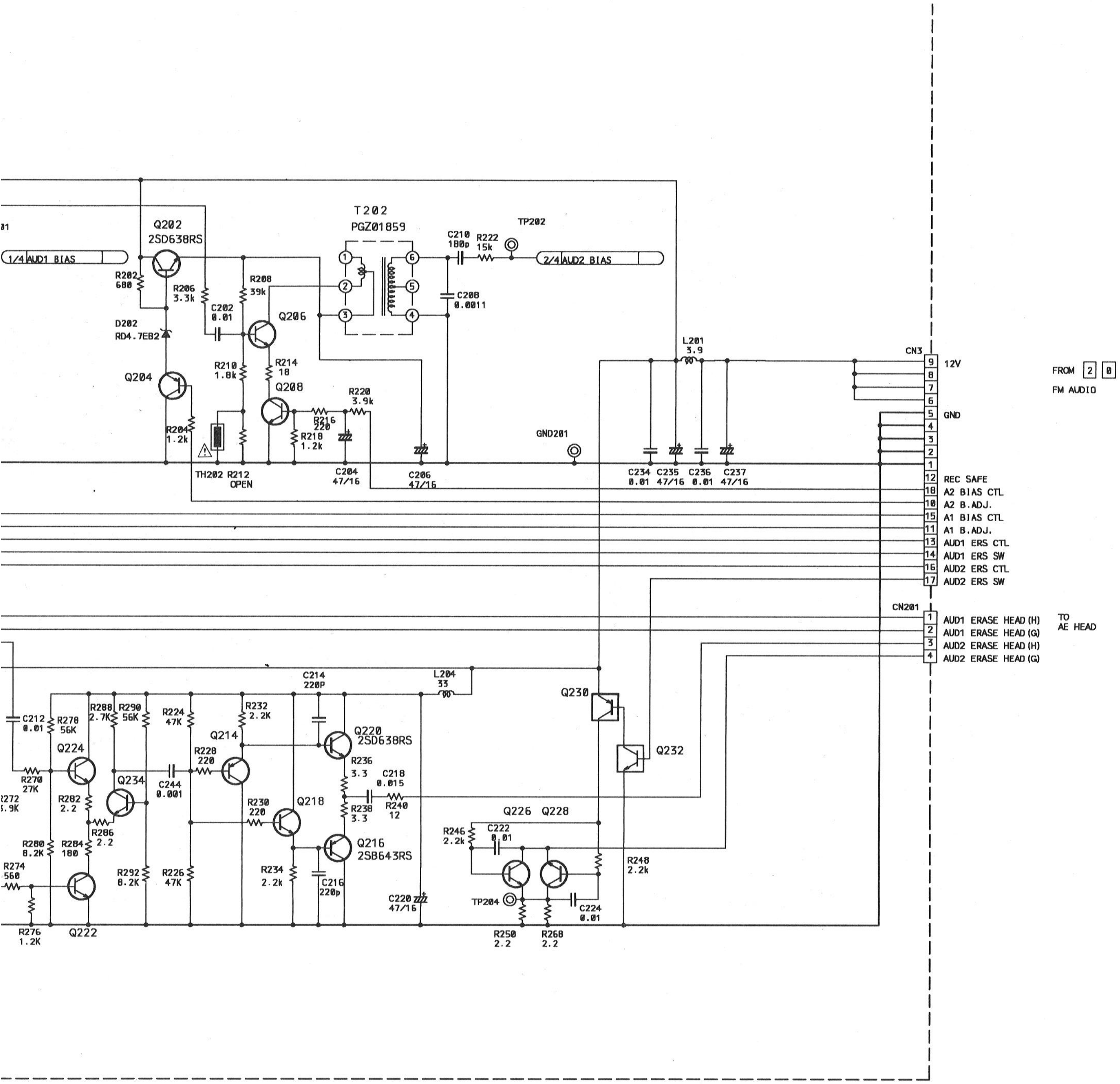

FROM 2 0
FM AUDIO
L:LTC PB
SEARCH1
SEARCH2
SEARCH3
LTC MUTE
CN5
7
8
9
10
6
1/4 L:LTC PB
R303
82k
IC301
TC4066BP
R304
100k
R305
56k
R306
33k
R302
82k
C301
0.015
MY
Vdd
Vss
R301
82k
R307
1.2k
R308
6.8M
2/4 LTC H.PB
R310
10k
R309
100
C302
220/16
C304
0.033
MY
R311
330
C303
10/16
1/4 LTC CTC
Q302
Q303
C305
820p
L301
2.2m
R312
10k
C306
1000p
C307
0.01
MY
C308
27p
C309
4.7/25
R315
82k
2/4 GND (LTC)
FROM 2 0
FM AUDIO
LTC PB
LTC REC
GND
GND
GND
CN5
2
1
5
4
3
2/4 LTC H.REC
IC303
DA302
C313
4.7/25
C315
10/16
C316
1/25
R344
6.8k
R320
10k
C314
4.7/25
R322
470k
R342
47k
R324
82k
R325
82k
R343
15k
C326
10/16
C317
47/16
R321
1M
R323
470k
R345
4.7k
Q305
Q306
1/4 LTC EE
1/4 LTC PB/EE
2/4 AUD2 REC/EE
6
5
4
3
2
1
A
B
C


IC305
M5278L09
1/4 12V(UNREG)
C310 10/16
C329 100p
IC302
R316 1.8k
C309 .7/25
R319 100k
1/4 LTC PB
:308 27p
R341 100k
R317 4.7k
C311 22/16
R318 4.7k
C312 47/16
C328 47/16
15 2k
1/4 GND(FIL)
1/4 12V(FIL)
TP301
IC304
CN4
5 12V
FROM 2 0
FM AUDIO
R328 10k
C318 4.7/25
R327 470k
R326 6.8k
R331 22k
C320 4.7/25
R334 10k
Q307
C321 220/16
R332 4.7k
R335 10k
R337 75
R330 6.8K
R329 100K
C319 10/16
R333 4.7k
R336 560
R338 10k
C322 47/16

— DIAGRAM (4/4) —

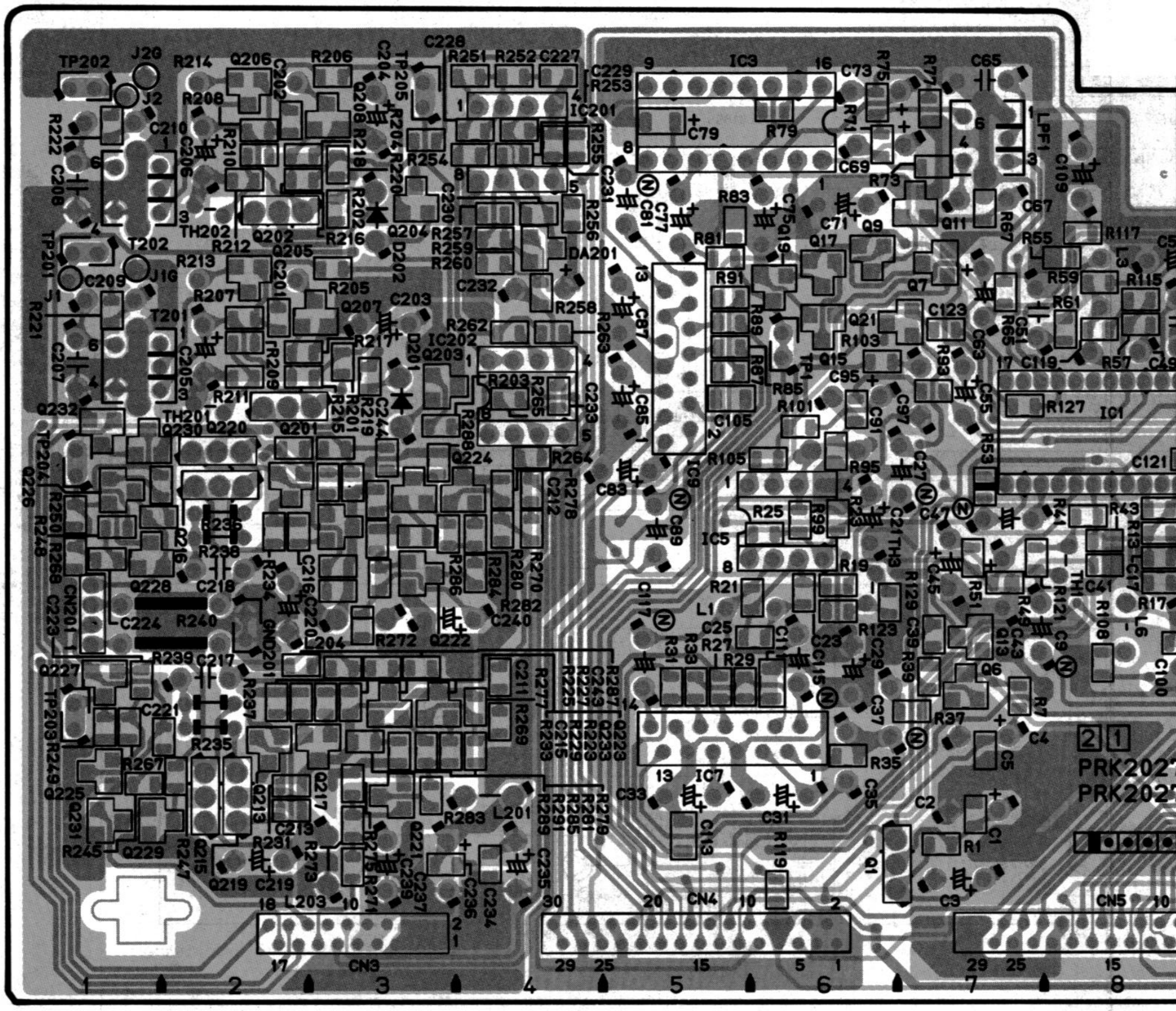


TP205
R253 10k
C228 270p
IC201 NJM4560D
R251 820k
R252 8.2k
C227 0.022
C229 270p
C231 0.01
R259 6.8k
R257 15k
DA201
R260 6.8k
R258 15k
C230 270p
R256 82k
R255 82k
C232 47/16
R254 8.2k
IC202
R262 27k
R263 27k
R264 12K
R265 12K
C233 0.01
Q201 2SD638RS
R201 680
D201 RD4.7EB2
R205 3.3k
R207 39k
C201 0.01
Q205
R209 1.8k
R213 10
Q203
Q207
R203 1.2k
TH201
R211 OPEN
R215 220
R219 3.9k
R217 1.2k
C203 47/16
C205 47/16
T201 PGZ01859
C209 180p
R221 15k
TP201
C207 0.0011
1/4 AUD1 BI
C211 0.01
R277 56k
R287 2.7k
R289 56k
R223 47k
R231 2.2k
C213 220p
L203 33
Q229
Q223
Q233
C243 0.001
Q213
R227 220
Q219 2SD638RS
R269 27k
R281 2.2
R285 2.2
R271 3.9k
R279 8.2k
R283 180
R229 220
Q217
R235 3.3
C217 0.015
R237 3.3
R239 12
Q215 2SB643RS
C215 220p
Q231
Q225
Q227
R245 2.2k
C221 0.01
R247 2.2k
C223 0.01
TP203
R249 2.2
R267 2.2
C219 47/16
R273 560
C239 22/10
R275 1.2k
Q221
R291 8.2k
R225 47k
R233 2.2k
C212 0.01
R270 27K
R272 3.9K
R280 8.2K
R274 560
C240 22/10
R276 1.2K
2 1 NORMAL AUDIO


T202
PGZ01859
TP202
Q202
2SD638RS
1/4 AUD1 BIAS
C210
180p
R222
15k
2/4 AUD2 BIAS
R202
680
R206
3.3k
R208
39k
C202
0.01
C208
0.0011
Q206
D202
RD4.7EB2
Q204
R210
1.8k
R214
10
Q208
R220
3.9k
R216
220
R204
1.2k
R218
1.2k
TH202
R212
OPEN
C204
47/16
C206
47/16
GND201
L201
3.9
C234
0.01
C235
47/16
C236
0.01
C237
47/16
CN3
9 12V
8
7
6
5 GND
4
3
2
1
12 REC SAFE
18 A2 BIAS CTL
10 A2 B.ADJ.
15 A1 BIAS CTL
11 A1 B.ADJ.
13 AUD1 ERS CTL
14 AUD1 ERS SW
16 AUD2 ERS CTL
17 AUD2 ERS SW
FROM 2 0
FM AUDIO
CN201
1 AUD1 ERASE HEAD (H)
2 AUD1 ERASE HEAD (G)
3 AUD2 ERASE HEAD (H)
4 AUD2 ERASE HEAD (G)
TO
AE HEAD
C214
220P
L204
33
Q230
Q232
C212
0.01
R278
56K
R288
2.7K
R290
56K
R224
47K
R232
2.2K
Q220
2SD638RS
Q224
Q214
R228
220
R236
3.3
C218
0.015
R270
27K
Q234
C244
0.001
R272
3.9K
R282
2.2
R230
220
Q218
R238
3.3
R240
12
Q226
Q228
R286
2.2
R280
8.2K
R284
180
Q216
2SB643RS
R246
2.2k
C222
0.01
R274
560
R292
8.2K
R226
47K
R234
2.2k
C216
220p
R248
2.2k
C220
47/16
TP204
C224
0.01
R276
1.2K
Q222
R250
2.2
R260
2.2

4.26 NORMAL AUDIO CIRCUIT BOARD (BR-S800)

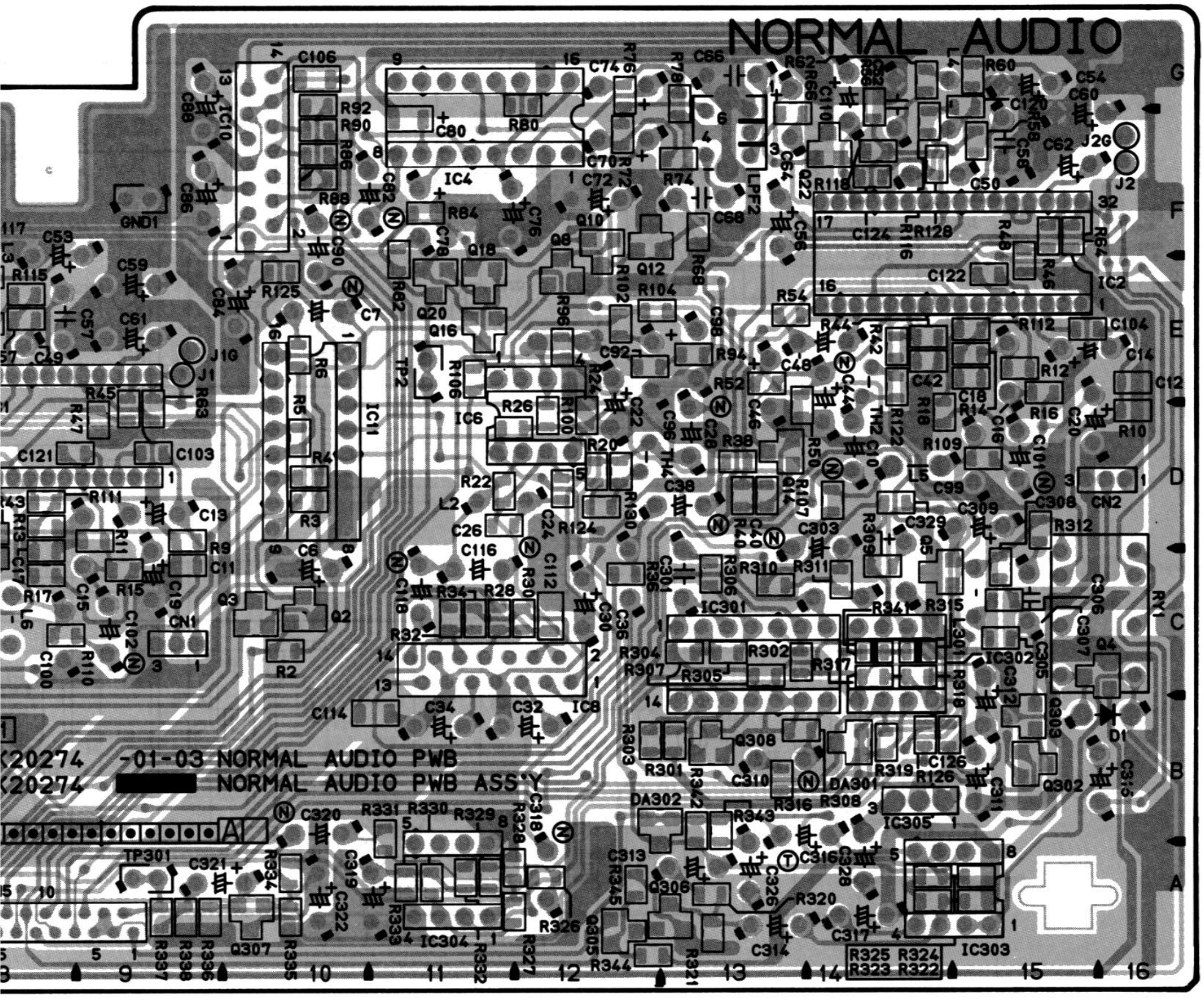
— SOLDER


IC1
IC3
IC5
IC7
IC9
IC201
IC202
CN3
CN4
CN5
CN201
LPF1
TP1
TP201
TP202
TP203
TP204
TP205
J1
J2
J1G
J2G
T201
T202
TH1
TH201
TH202
TH3
DA201
D201
D202
GND201
L1
L201
L203
PRK2021
PRK2022
1
2
3
4
5
6
7
8

6
5
4
3
2
1

A
B
C

DER Side —


NORMAL AUDIO
X20274 -01-03 NORMAL AUDIO PWB
X20274 NORMAL AUDIO PWB ASS'Y
IC2
IC4
IC6
IC8
IC10
IC11
IC301
IC302
IC303
IC304
IC305
LPF2
RY1
CN1
CN2
J1
J1G
J2
J2G
GND1
TP2
TP301
DA301
DA302
D1
Q2
Q3
Q4
Q5
Q8
Q10
Q12
Q16
Q18
Q20
Q22
Q302
Q305
Q306
Q307
Q308
Q309
L2
L3
L4
L5
L6
L301
TH2
TH4
A
B
C
D
E
F
G
9
10
11
12
13
14
15
16

— DC Voltage (1/2) —

SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC1	1	0.0	0.0
	2	9.4	9.4
	3	0.0	0.1
	4	2.1	2.0
	5	2.1	2.0
	6	2.1	2.0
	7	2.1	2.0
	8	2.1	2.0
	9	0.0	0.0
	10	0.0	5.2
	11	0.0	0.0
	12	0.0	0.0
	13	7.8	7.8
	14	4.9	5.4
	15	4.8	—
	16	4.8	—
	17	4.9	—
	18	0.0	0.0
	19	0.0	0.0
	20	0.0	0.0
	21	0.0	0.0
	22	0.0	0.0
	23	0.5	0.5
	24	4.8	—
	25	5.2	5.2
	26	10.1	10.2
	27	9.1	9.1
	28	10.3	10.3
	29	10.3	10.3
	30	10.2	10.2
	31	9.5	9.5
	32	0.0	0.0
IC2	1	0.0	0.0
	2	9.4	6.7
	3	0.0	1.7
	4	2.1	2.0
	5	2.1	2.1
	6	2.1	2.1
	7	2.1	2.1
	8	2.1	2.1
	9	0.0	0.0
	10	0.0	0.0
	11	0.0	0.0
	12	0.0	0.0
	13	7.8	7.7
	14	4.8	4.8
	15	4.9	4.8
	16	4.8	4.8
	17	4.9	4.9
	18	0.0	0.0
	19	0.0	0.0
	20	0.0	0.0
	21	0.0	0.0
	22	0.0	0.0
	23	0.5	0.5
	24	4.8	4.8
	25	5.2	0.0
	26	10.2	0.0
	27	9.0	0.0
	28	10.3	10.3
	29	10.3	10.3
	30	10.1	10.1
	31	9.5	9.4
	32	0.0	0.0
IC3	1	5.2	5.3
	2	10.3	10.3
	3	5.2	5.2
	4	5.3	5.3
	5	0.0	2.1
	6	5.4	—
	7	0.6	0.5
	8	5.3	—
	9	5.3	5.3
	10	0.6	0.4
	11	5.3	5.3
	12	0.0	5.2
	13	1.3	1.2
	14	5.3	5.3
	15	0.0	0.0
	16	5.3	5.3
IC4	1	5.2	5.3
	2	10.3	10.3
	3	5.2	5.3
	4	5.3	5.3
	5	0.0	2.1
	6	5.4	5.4
	7	0.4	0.4
	8	5.3	5.3
	9	5.3	5.3
	10	0.6	0.4
	11	5.3	5.3
	12	0.0	0.0
	13	1.2	1.2
	14	5.3	5.3
	15	0.0	0.0
	16	5.3	5.3
IC5	1	5.2	5.2
	2	5.2	5.2
	3	5.1	5.2
	4	0.0	0.0
	5	5.1	5.2
	6	5.2	5.2
	7	5.2	—
	8	10.3	10.3
IC6	1	5.2	5.2
	2	5.2	5.2
	3	5.2	5.2
	4	0.0	0.0
	5	5.2	5.2
	6	5.2	5.2
	7	5.2	5.2
	8	10.3	10.3
IC7	1	10.3	10.3
	2	4.3	—
	3	4.1	—
	4	5.6	5.6
	5	10.0	10.2
	6	1.8	3.0
	7	0.0	0.0
	8	3.2	5.3
	9	0.0	0.0
	10	3.4	5.3
	11	0.0	0.0
	12	0.0	0.0
	13	4.1	—
	14	4.5	—
IC8	1	10.3	10.3
	2	4.6	4.5
	3	4.1	4.1
	4	5.6	5.6
	5	10.1	10.2
	6	3.6	0.0
	7	0.0	0.0
	8	3.4	5.3
	9	0.1	0.0
	10	4.5	5.3
	11	0.0	0.0
	12	0.0	0.0
	13	4.1	4.1
	14	4.6	4.6
IC9	1	10.3	10.3
	2	4.6	4.5
	3	4.1	4.1
	4	5.5	5.5
	5	10.2	10.2
	6	0.0	0.0
	7	0.0	0.0
	8	2.3	5.1
	9	0.0	0.0
	10	3.9	5.3
	11	2.0	0.0
	12	0.0	0.0
	13	4.1	—
	14	4.6	—
IC10	1	10.3	10.3
	2	4.6	4.5
	3	4.1	4.1
	4	5.5	5.5
	5	10.2	10.2
	6	0.0	0.0
	7	0.0	0.0
	8	2.4	5.1
	9	0.0	0.0
	10	3.9	5.3
	11	0.0	0.0
	12	0.0	0.0
	13	4.1	4.1
	14	4.6	4.6
IC11	1	4.1	4.1
	2	4.1	3.9
	3	5.2	5.2
	4	5.2	5.1
	5	5.1	5.1
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	10.2	0.0
	10	10.2	10.3
	11	10.2	10.3
	12	4.1	4.1
	13	4.1	4.1
	14	4.1	4.1
	15	4.1	4.1
	16	10.3	10.3
IC201	1	6.0	6.0
	2	5.3	5.6
	3	6.0	6.1
	4	0.0	0.0
	5	5.9	6.0
	6	6.1	6.0
	7	6.0	6.0
	8	12.0	12.0
IC202	1	6.0	6.0
	2	6.0	6.0
	3	6.0	6.0
	4	0.0	0.0
	5	6.0	6.0
	6	6.4	6.4
	7	6.3	6.3
	8	12.0	12.0
IC301	1	5.2	5.2
	2	5.2	5.2
	3	5.2	5.2
	4	5.2	5.2
	5	5.2	10.2
	6	0.1	10.1
	7	0.0	0.0
	8	5.1	5.2
	9	5.2	5.2
	10	5.2	5.2
	11	5.2	5.2
	12	10.1	10.1
	13	10.1	10.2
	14	10.3	10.3
IC302	1	5.2	5.2
	2	5.2	5.2
	3	5.1	5.2
	4	0.0	0.0
	5	5.1	5.2
	6	5.2	5.2
	7	5.2	5.2
	8	10.3	10.3
IC303	1	5.2	5.2
	2	5.2	5.2
	3	5.1	5.2
	4	0.0	0.0
	5	2.1	5.1
	6	5.1	5.1
	7	5.1	5.1
	8	10.3	10.3
IC304	1	0.1	0.1
	2	—	—
	3	—	—
	4	0.0	0.0
	5	—	—
	6	—	0.3
	7	0.0	0.0
	8	12.0	12.1
TRANSISTOR			
Q1	B	11.0	11.0
	C	12.0	12.1
	E	10.3	10.3
Q2	B	0.1	7.3
	C	10.2	0.0
	E	0.0	0.0
Q3	B	0.0	0.0
	C	10.2	10.3
	E	0.0	0.0
Q4	B	0.0	0.0
	C	12.0	12.1
	E	0.0	0.0
Q5	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q6	B	5.2	0.0
	C	0.0	1.6
	E	0.0	0.0
Q7	B	0.0	5.2
	C	12.0	0.0
	E	0.0	0.0
Q8	B	0.0	5.2
	C	12.0	0.0
	E	0.0	0.0
Q9	B	12.0	0.0
	C	0.0	1.1
	E	12.0	1.2
Q10	B	12.0	0.0
	C	0.0	1.1
	E	12.0	1.2
Q11	B	0.0	1.1
	C	0.0	0.0
	E	0.0	0.0
Q12	B	0.0	1.1
	C	0.0	0.0
	E	0.0	0.0
Q13	B	0.0	1.6
	C	0.0	0.0
	E	0.0	0.0
Q14	B	0.0	1.6
	C	0.0	0.0
	E	0.0	0.0
Q15	B	0.0	0.0
	C	11.6	1.2
	E	0.0	0.0
Q16	B	0.0	0.0
	C	12.0	1.2
	E	0.0	0.0
Q17	B	12.0	1.2
	C	0.0	—
	E	12.0	1.2
Q18	B	12.0	1.2
	C	0.0	0.0
	E	12.0	1.2
Q19	B	0.0	—
	C	0.0	—
	E	0.0	0.0
Q20	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q201	B	10.7	11.2
	C	12.0	12.0
	E	10.0	10.6
Q202	B	11.2	11.3
	C	12.0	12.0
	E	10.6	10.7
Q203	B	4.5	5.1
	C	0.0	0.0
	E	5.1	5.8
Q204	B	5.1	5.1
	C	0.0	0.0
	E	5.7	5.8
Q205	B	0.7	0.7
	C	10.7	10.7
	E	1.9	1.7

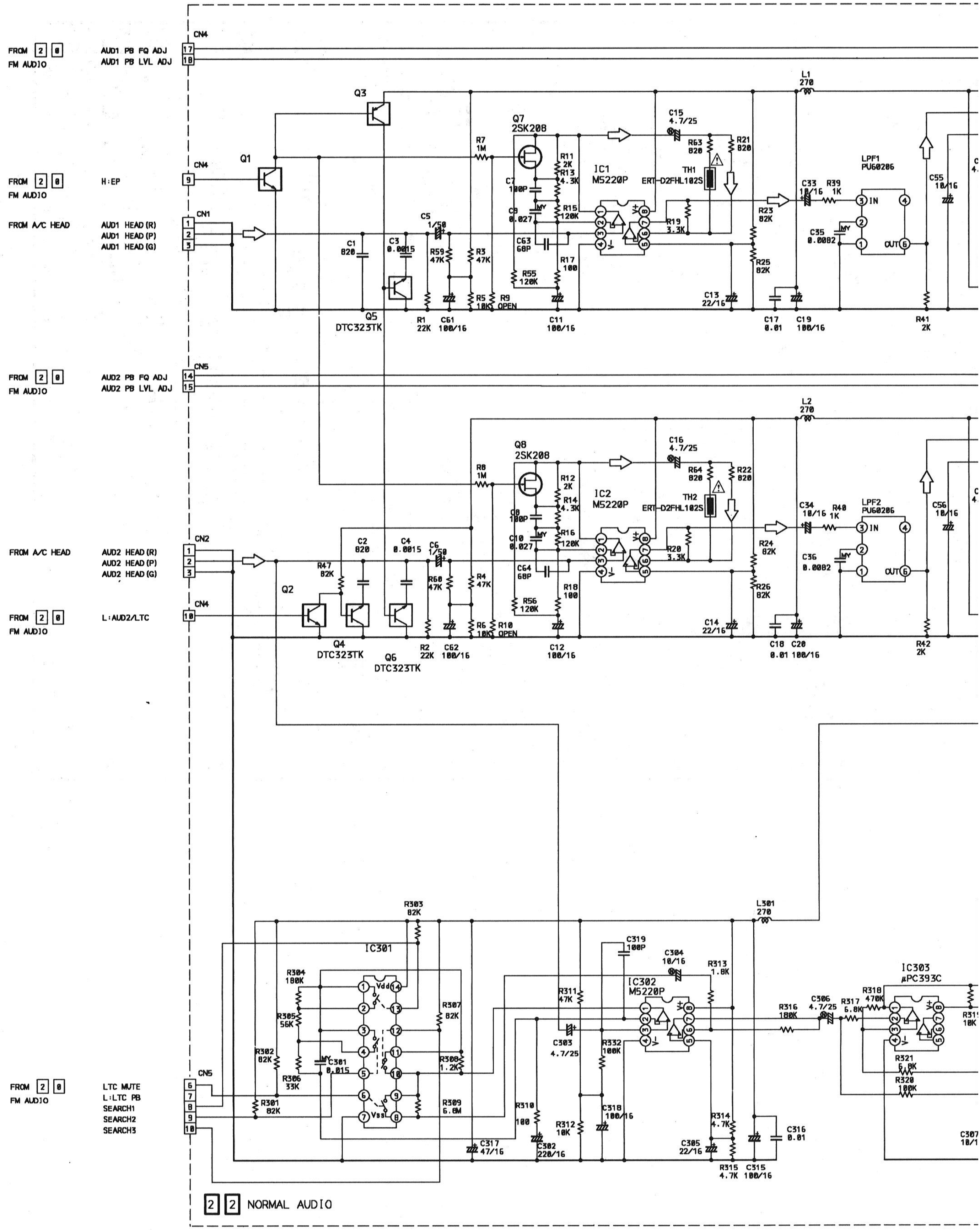
— DC Voltage (2/2) —

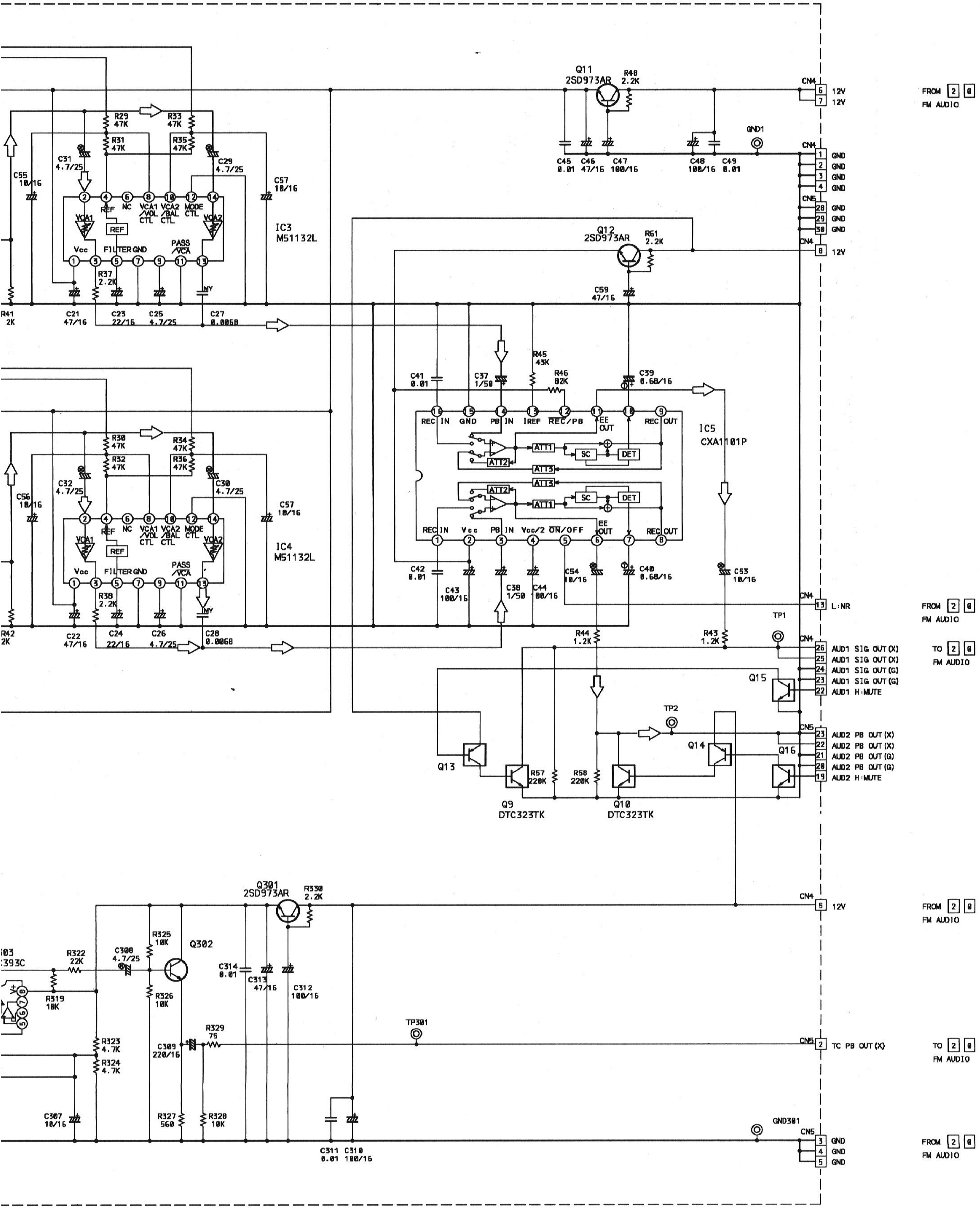
SYMBOL	No.	REC	PB
Q206	B	0.7	0.7
	C	10.7	10.7
	E	1.7	1.7
Q207	B	0.0	0.0
	C	1.7	1.7
	E	0.0	0.0
Q208	B	0.0	0.0
	C	1.7	1.7
	E	0.0	0.0
Q213	B	0.0	0.0
	C	0.0	0.0
	E	0.7	0.7
Q214	B	0.0	0.0
	C	0.0	0.0
	E	0.7	0.7
Q215	B	0.0	0.0
	C	0.0	0.0
	E	0.4	0.4
Q216	B	0.0	0.0
	C	0.0	0.0
	E	0.4	0.4
Q217	B	0.0	0.0
	C	12.0	12.0
	E	0.0	0.0
Q218	B	0.0	0.0
	C	12.0	12.0
	E	0.0	0.0
Q219	B	0.7	0.7
	C	12.0	12.0
	E	0.4	0.4
Q220	B	0.7	0.7
	C	12.0	12.0
	E	0.4	0.4
Q221	B	2.2	2.2
	C	0.0	0.0
	E	0.0	0.0
Q222	B	2.2	2.2
	C	0.0	0.0
	E	0.0	0.0
Q223	B	0.0	0.0
	C	4.9	5.0
	E	0.0	0.0
Q224	B	0.0	0.0
	C	4.9	4.9
	E	0.0	0.0
Q225	B	0.8	0.8
	C	0.0	0.0
	E	0.0	0.0
Q226	B	0.8	0.8
	C	0.0	0.0
	E	0.0	0.0
Q227	B	0.8	0.8
	C	0.0	0.0
	E	0.0	0.0
Q228	B	0.8	0.8
	C	0.0	0.0
	E	0.0	0.0
Q229	B	0.0	0.0
	C	12.0	12.0
	E	12.0	12.0
Q230	B	0.0	0.0
	C	12.0	12.0
	E	12.0	12.0
Q231	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0

SYMBOL	No.	REC	PB
Q232	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q302	B	10.3	10.3
	C	0.0	0.0
	E	10.3	10.3
Q303	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q305	B	0.0	0.0
	C	1.1	1.1
	E	0.0	0.0
Q306	B	1.1	1.1
	C	0.0	0.0
	E	0.0	0.0
Q307	B	5.8	5.8
	C	12.0	12.1
	E	5.1	5.1
CONNECTOR			
CN1	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
CN2	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
CN3	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	0.0	0.0
	6	12.0	12.1
	7	12.0	12.1
	8	12.0	12.1
	9	12.0	12.1
	10	5.1	5.1
	11	4.5	4.5
	12	—	0.9
	13	5.2	0.0
	14	5.2	0.0
	15	5.1	0.0
	16	5.2	0.0
	17	5.2	0.0
	18	5.1	0.0
CN4	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	12.0	12.1
	6	12.0	12.1
	7	12.0	12.1
	8	12.0	12.1
	9	0.0	0.0
	10	—	0.0
	11	0.0	0.0
	12	5.2	5.2
	13	0.0	0.0
	14	5.2	0.0
	15	5.2	0.0
	16	0.0	5.2
	17	1.2	1.3
	18	0.9	0.9
	19	0.0	0.0
	20	2.3	2.3
	21	2.0	2.1
	22	0.0	0.7
	23	0.0	0.0
	24	0.0	0.0
	25	—	0.1
	26	—	0.2
	27	0.8	0.0
	28	0.8	0.0
	29	5.7	5.7
	30	5.7	5.7

SYMBOL	No.	REC	PB
CN5	1	2.7	—
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	0.0	0.0
	6	0.0	0.0
	7	0.1	0.1
	8	10.2	9.2
	9	0.1	0.1
	10	10.2	9.1
	11	5.2	0.0
	12	5.2	0.0
	13	0.0	5.2
	14	3.5	3.2
	15	1.2	1.2
	16	0.0	0.0
	17	2.3	2.3
	18	2.2	2.2
	19	0.0	0.0
	20	0.0	0.0
	21	0.0	0.0
	22	0.0	0.1
	23	0.0	0.0
	24	0.0	0.0
	25	0.0	0.0
	26	5.7	5.7
	27	5.7	5.7
	28	0.0	0.0
	29	0.0	0.0
	30	0.0	0.0

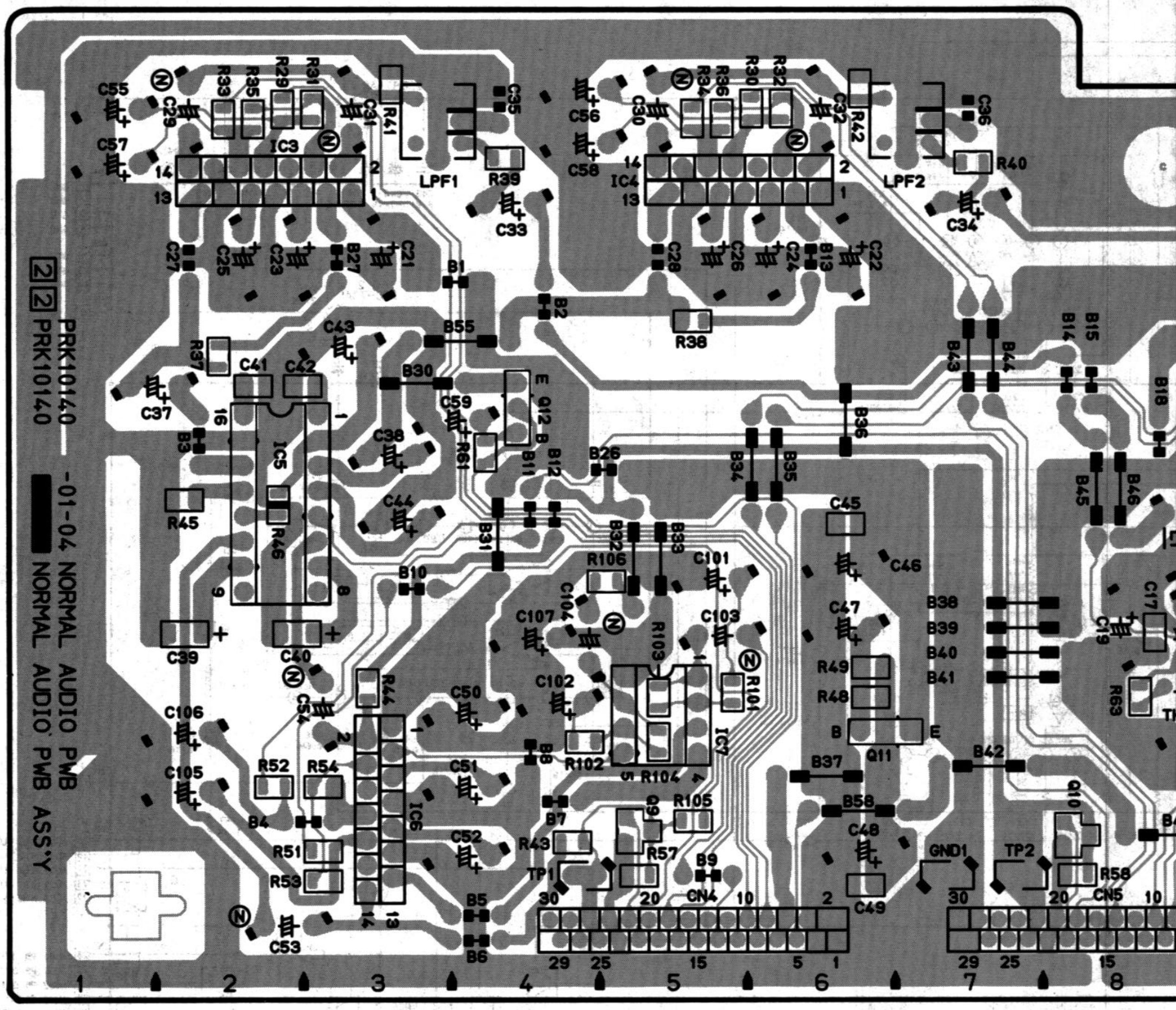
4.27 NORMAL AUDIO SCHEMATIC DIAGRAM (BR-S500)


FROM 2 0 FM AUDIO
AUD1 PB FQ ADJ
AUD1 PB LVL ADJ
CN4
17
18
FROM 2 0 FM AUDIO
H:EP
9
FROM A/C HEAD
AUD1 HEAD (R)
AUD1 HEAD (P)
AUD1 HEAD (G)
CN1
Q1
Q3
Q5 DTC323TK
Q7 2SK208
R7 1M
C5 1/50
C1 820
C3 0.0015
R59 47K
R3 47K
R1 22K
C61 100/16
R5 10K
R9 OPEN
R11 2K
R13 4.3K
C7 100P
C9 0.027
R15 120K
C63 68P
R55 120K
R17 100
C11 100/16
IC1 M5220P
C15 4.7/25
R63 820
R21 820
TH1 ERT-D2FHL102S
R19 3.3K
C13 22/16
R23 82K
R25 82K
L1 270
C33 10/16
R39 1K
C17 0.01
C19 100/16
LPF1 PU60206
C35 0.0082
IN
OUT
C55 10/16
R41 2K
FROM 2 0 FM AUDIO
AUD2 PB FQ ADJ
AUD2 PB LVL ADJ
CN5
14
15
Q8 2SK208
R8 1M
R12 2K
R14 4.3K
C8 100P
C10 0.027
R16 120K
C64 68P
R56 120K
R18 100
IC2 M5220P
C16 4.7/25
R64 820
R22 820
TH2 ERT-D2FHL102S
R20 3.3K
C14 22/16
R24 82K
R26 82K
L2 270
C34 10/16
R40 1K
LPF2 PU60206
C36 0.0082
C56 10/16
R42 2K
C18 0.01
C20 100/16
FROM A/C HEAD
AUD2 HEAD (R)
AUD2 HEAD (P)
AUD2 HEAD (G)
CN2
C2 820
C4 0.0015
C6 1/50
R47 82K
R60 47K
R4 47K
R6 10K
R10 OPEN
R2 22K
C62 100/16
C12 100/16
Q2
Q4 DTC323TK
Q6 DTC323TK
FROM 2 0 FM AUDIO
L:AUD2/LTC
CN4
10
R303 82K
IC301
R304 100K
R305 56K
R306 33K
R302 82K
R301 82K
C301 0.015
Vdd
Vss
R307 82K
R308 1.2K
R309 6.8M
C317 47/16
R310 100
C302 220/16
R311 47K
C303 4.7/25
R332 100K
C318 100/16
R312 10K
C319 100P
C304 10/16
IC302 M5220P
R313 1.8K
R314 4.7K
C305 22/16
R315 4.7K
C315 100/16
C316 0.01
L301 270
R316 100K
C306 4.7/25
R317 6.8K
R318 470K
IC303 μPC393C
R319 10K
R321 6.8K
R320 100K
C307 10/1
FROM 2 0 FM AUDIO
LTC MUTE
L:LTC PB
SEARCH1
SEARCH2
SEARCH3
CN5
6
7
8
9
10
2 2 NORMAL AUDIO


Q11
2SD973AR
R40
2.2K
C45
0.01
C46
47/16
C47
100/16
C48
100/16
C49
0.01
GND1
CN4
6 12V
7 12V
FROM 2 0
FM AUDIO
CN4
1 GND
2 GND
3 GND
4 GND
CN5
28 GND
29 GND
30 GND
CN4
8 12V
Q12
2SD973AR
R61
2.2K
C59
47/16
R29
47K
R33
47K
R31
47K
R35
47K
C31
4.7/25
C29
4.7/25
C55
10/16
C57
10/16
REF
NC
VCA1 /VOL CTL
VCA2 /BAL CTL
MODE CTL
VCA1
VCA2
REF
Vcc
FILTER GND
PASS /VCA
IC3
M51132L
R37
2.2K
R41
2K
C21
47/16
C23
22/16
C25
4.7/25
C27
0.0068
MY
R30
47K
R34
47K
R32
47K
R36
47K
C32
4.7/25
C30
4.7/25
C56
10/16
C57
10/16
IC4
M51132L
R38
2.2K
R42
2K
C22
47/16
C24
22/16
C26
4.7/25
C28
0.0068
C41
0.01
C37
1/50
R45
43K
R46
82K
C39
0.68/16
REC IN
GND
PB IN
IREF
REC/PB
EE OUT
REC OUT
ATT1
ATT2
ATT3
SC
DET
IC5
CXA1101P
REC IN
Vcc
PB IN
Vcc/2
ON/OFF
EE OUT
REC OUT
C42
0.01
C43
100/16
C38
1/50
C44
100/16
C54
10/16
C40
0.68/16
C53
10/16
CN4
13 L:NR
FROM 2 0
FM AUDIO
TP1
R44
1.2K
R43
1.2K
CN4
26 AUD1 SIG OUT (X)
25 AUD1 SIG OUT (X)
24 AUD1 SIG OUT (G)
23 AUD1 SIG OUT (G)
22 AUD1 H:MUTE
TO 2 0
FM AUDIO
Q15
TP2
Q14
Q16
CN5
23 AUD2 PB OUT (X)
22 AUD2 PB OUT (X)
21 AUD2 PB OUT (G)
20 AUD2 PB OUT (G)
19 AUD2 H:MUTE
Q13
R57
220K
R58
220K
Q9
DTC323TK
Q10
DTC323TK
Q301
2SD973AR
R330
2.2K
CN4
5 12V
FROM 2 0
FM AUDIO
R325
10K
Q302
C308
4.7/25
R322
22K
303
393C
R319
10K
R326
10K
C314
0.01
C313
47/16
C312
100/16
TP301
R323
4.7K
R324
4.7K
C309
220/16
R329
75
CN5
2 TC PB OUT (X)
TO 2 0
FM AUDIO
C307
10/16
R327
560
R328
10K
C311
0.01
C310
100/16
GND301
CN5
3 GND
4 GND
5 GND
FROM 2 0
FM AUDIO

4.28 NORMAL AUDIO CIRCUIT BOARD (BR-S500)

— SOLDE


PRK10140 -01-04 NORMAL AUDIO PWB
2 PRK10140 NORMAL AUDIO PWB ASS'Y
IC3
IC4
IC5
IC6
IC7
LPF1
LPF2
Q11
Q12
Q10
Q9
TP1
TP2
GND1
CN4
CN5
C55
C57
C29
C31
C33
C35
C56
C58
C30
C32
C34
C36
C27
C25
C23
C21
C28
C26
C24
C22
B27
B13
B1
B2
B55
R33
R35
R29
R31
R34
R36
R30
R32
R41
R42
R39
R40
R38
R37
C43
C41
C42
C37
B3
B30
C59
R61
C38
C44
B26
B11
B12
B31
B32
B33
B34
B35
B36
B43
B44
B14
B15
B18
B45
B46
C45
C46
C47
R45
R46
R106
C101
C104
C107
C103
R103
C102
R101
R49
R48
B38
B39
B40
B41
C17
C19
R63
B10
C39
C40
C54
R44
C50
C51
C52
C106
C105
R52
R54
B4
R51
R53
C53
B8
R102
R104
B37
B42
B58
B7
R43
R105
R57
B9
C48
C49
R58
B5
B6
1
2
3
4
5
6
7
8
30
20
10
29
25
15
5
1
B
E

SYMBOL	No.	PB
I		C
IC1	1	5.5
	2	5.6
	3	5.6
	4	0.0
	5	5.6
	6	5.6
	7	5.5
	8	11.0
IC2	1	5.5
	2	5.6
	3	5.5
	4	0.0
	5	5.6
	6	5.6
	7	5.6
	8	11.0
IC3	1	11.1
	2	4.9
	3	4.4
	4	5.5
	5	11.0
	6	0.0
	7	0.0
	8	3.4
	9	0.0
	10	3.1

SYMBOL	No.	PE
IC3	11	0.0
	12	0.0
	13	4.4
	14	4.9
IC4	1	11.1
	2	4.9
	3	4.4
	4	5.5
	5	11.0
	6	0.0
	7	0.0
	8	3.5
	9	0.0
	10	4.1
	11	0.0
	12	0.0
	13	4.4
	14	4.9
IC5	1	5.9
	2	11.6
	3	5.9
	4	5.9
	5	0.0
	6	6.0
	7	0.0
	8	5.9
	9	5.9
	10	—

SYMBOL	No.	PB
IC5	11	6.0
	12	11.5
	13	1.2
	14	5.9
	15	0.0
	16	5.9
IC301	1	5.5
	2	5.5
	3	5.5
	4	5.5
	5	0.0
	6	0.0
	7	0.0
	8	5.4
	9	5.5
	10	0.0
	11	5.5
	12	11.0
	13	11.0
	14	11.0
IC302	1	5.5
	2	5.6
	3	5.6
	4	0.0
	5	5.5
	6	5.6
	7	5.5
	8	11.0

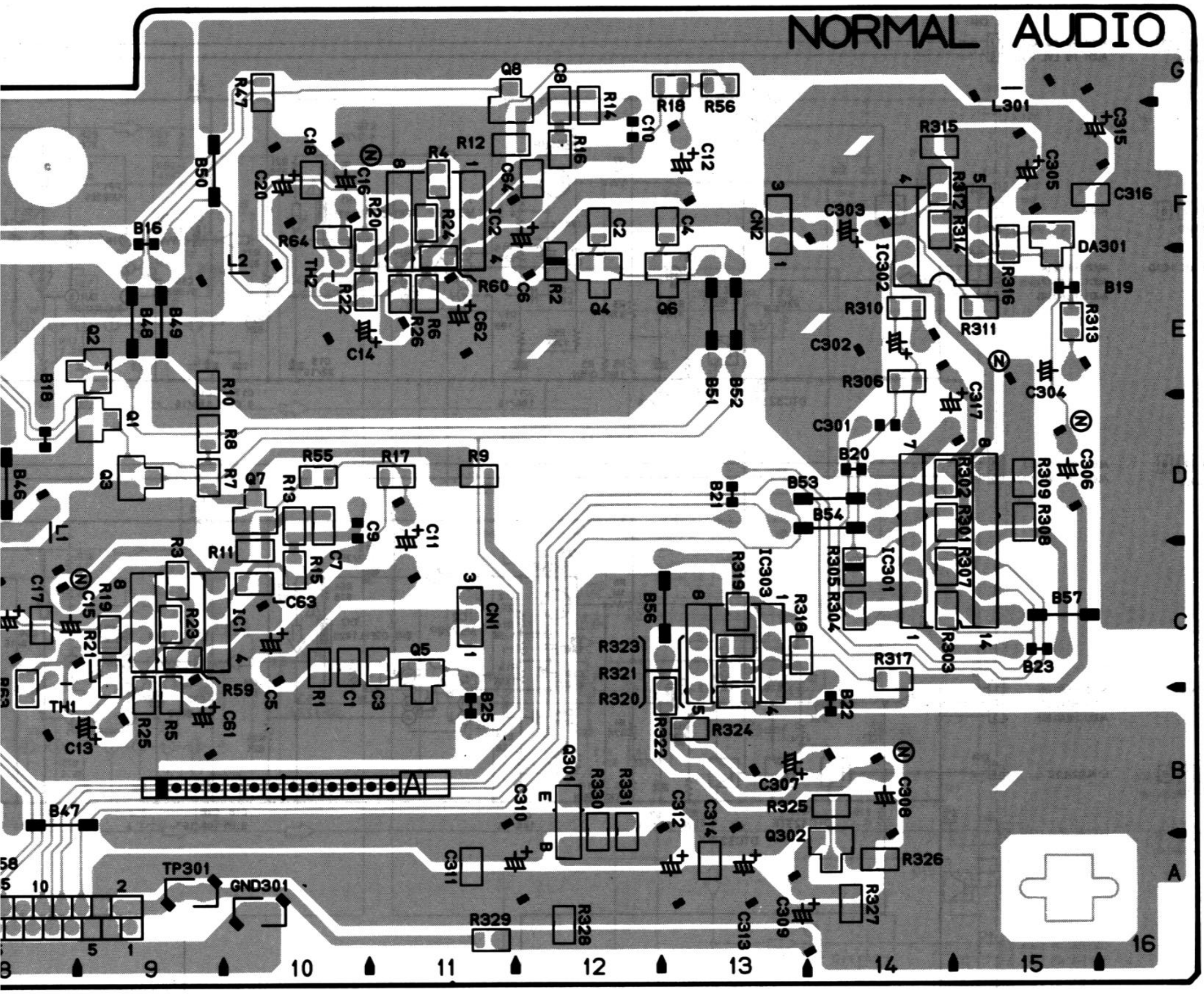
SYMBOL	No.	PB
IC303	1	0.0
	2	—
	3	1.7
	4	0.0
	5	0.3
	6	0.4
	7	0.0
	8	11.5
TRANSISTOR		
Q1	B	0.0
	C	10.6
	E	0.0
Q2	B	0.0
	C	0.9
	E	0.0
Q3	B	10.6
	C	0.0
	E	11.1
Q4	B	0.9
	C	0.0
	E	0.0
Q5	B	0.0
	C	0.0
	E	0.0

SYMBOL	No.	REC
Q6	B	0.0
	C	0.0
	E	0.0
Q7	B	5.5
	C	6.0
	E	5.5
Q8	B	5.5
	C	6.0
	E	5.5
Q9	B	0.0
	C	—
	E	0.0
Q10	B	0.0
	C	0.0
	E	0.0
Q11	B	11.8
	C	12.3
	E	11.1
Q12	B	12.2
	C	12.3
	E	11.6

SYMBOL	No.	PB
Q301	B	12.1
	C	12.3
	E	11.5
Q302	B	5.6
	C	11.5
	E	4.9
CONNECTOR		
CN1	1	0.0
	2	0.0
	3	0.0
CN2	1	0.0
	2	0.0
	3	0.0

SYMBOL	No.
CN4	1
	2
	3
	4
	5
	6
	7
	8
	9
	10
	11
	12
	13
	14
	15
	16
	17
	18
	19
	20
	21
	22
	23
	24
	25
	26
	27
	28
	29
	30

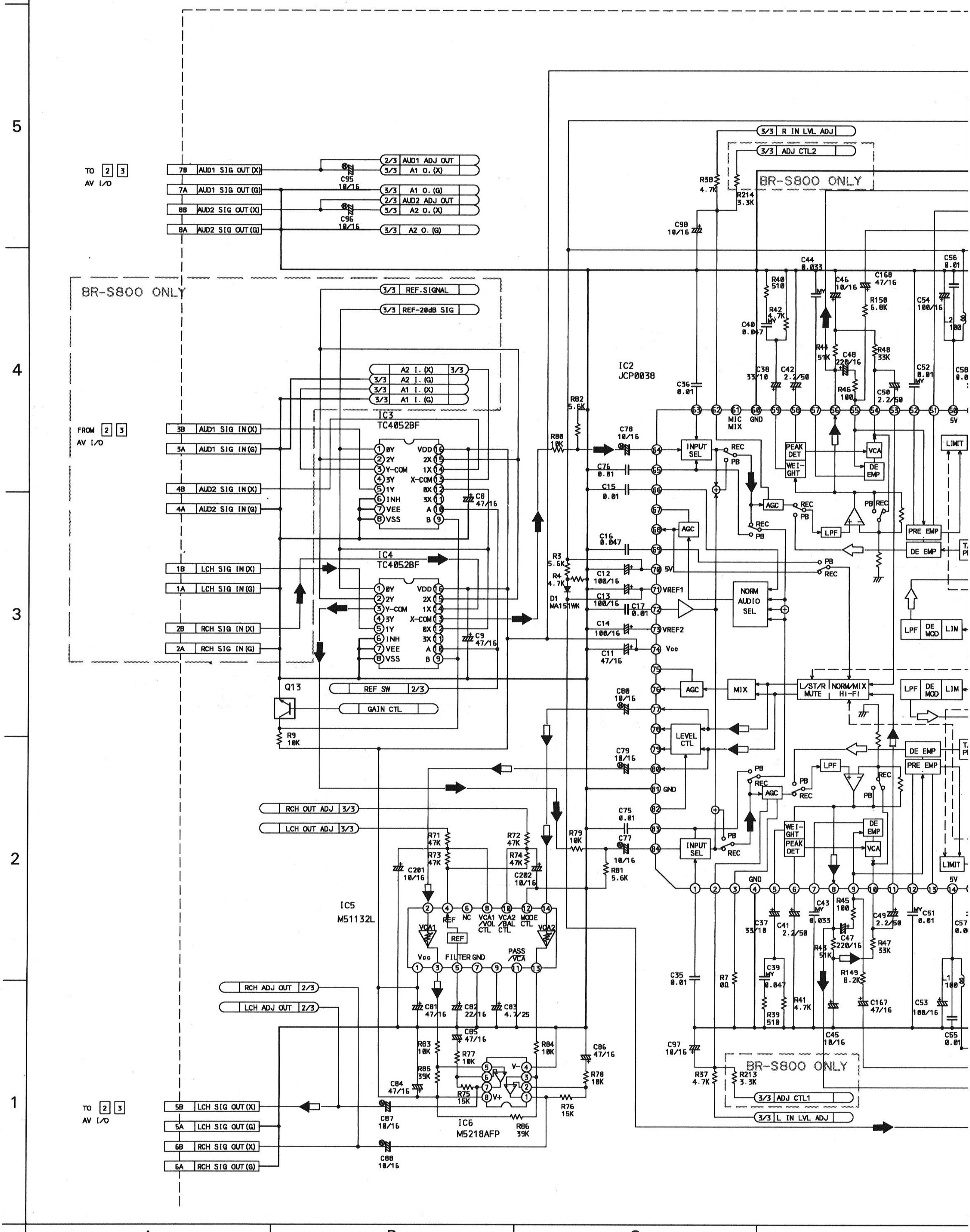
OLDER Side —

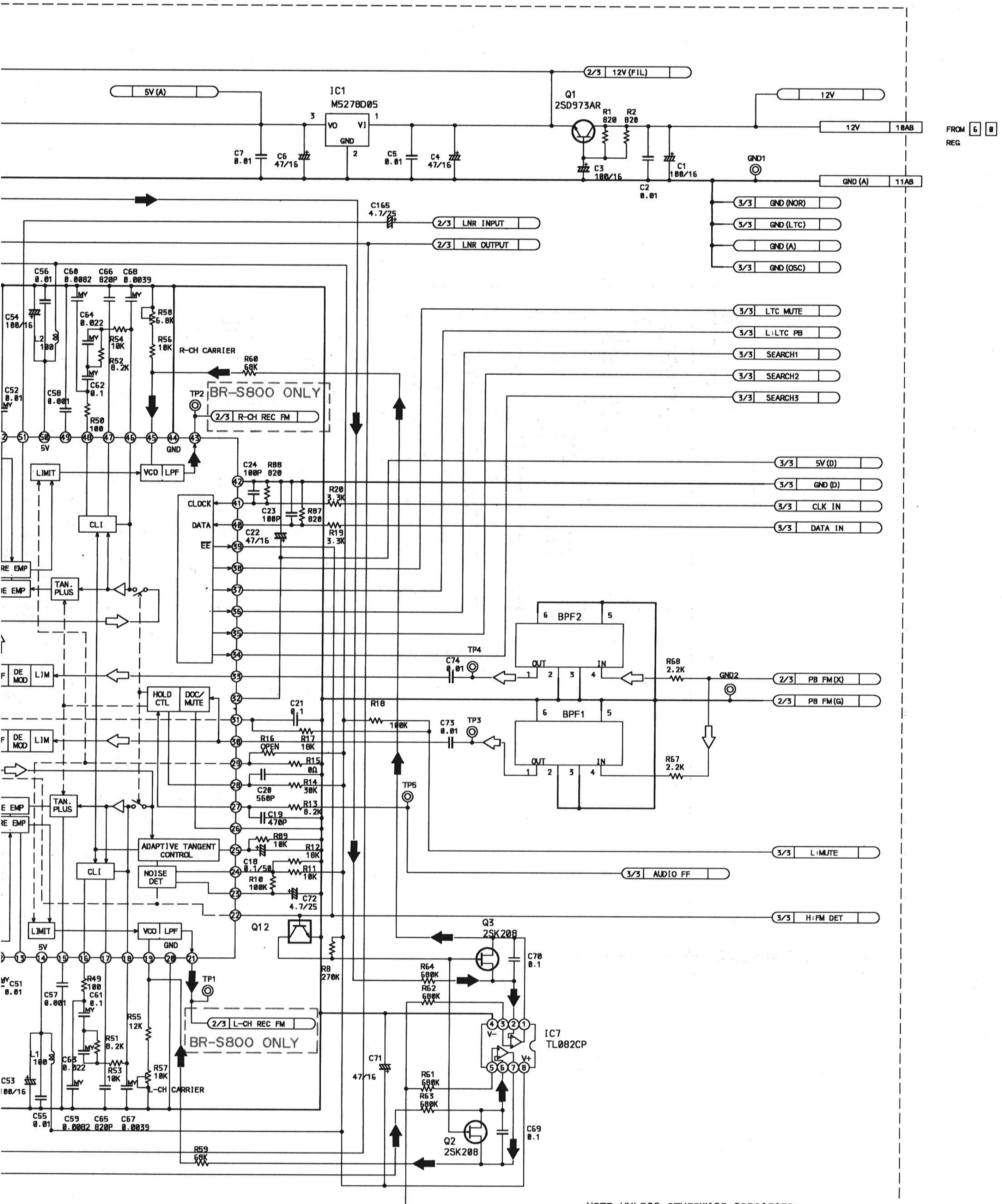

NORMAL AUDIO
G
F
E
D
C
B
A
Q8
C8
R14
R18
R56
C10
C12
R47
B50
C18
C20
C16
R4
R12
C64
R16
IC2
R20
R24
R64
TH2
R22
R26
R6
R60
C6
R2
C2
C4
Q4
Q6
C62
C14
L2
B16
B48
B49
Q2
B18
Q1
Q3
R10
R8
R7
B46
L1
Q7
R13
R55
R17
R9
C9
C11
R11
R15
C7
C63
R3
R19
C15
C17
R21
R23
IC1
R59
TH1
C13
R25
R5
C61
C5
R1
C1
C3
Q5
CN1
B25
CN2
B51
B52
L301
R315
C315
C305
C316
R312
R314
IC302
C303
DA301
B19
R316
R310
R311
R313
C302
R306
C317
C304
C301
B20
R302
R301
R309
R308
C306
B21
B53
B54
R305
R304
IC301
R307
B57
R303
B23
R319
IC303
R318
B56
R323
R321
R320
R317
B22
R322
R324
C307
C308
Q301
R330
R331
C310
C312
C314
R325
Q302
R326
C311
R329
R328
C313
C309
R327
B47
58
TP301
GND301
A
E
B
5
10
2
1
8
9
10
11
12
13
14
15
16

No.	PB	SYMBOL	No.	PB
1	0.0	CN5	1	0.0
2	0.0		2	0.0
3	0.0		3	0.0
4	0.0		4	0.0
5	12.3		5	0.0
6	12.3		6	0.0
7	12.3		7	0.0
8	12.3		8	11.0
9	0.0		9	0.0
10	0.0		10	11.0
11	0.0		11	0.0
12	0.0		12	0.0
13	2.6		13	5.2
14	0.0		14	2.7
15	0.0		15	1.5
16	5.2		16	0.0
17	0.7		17	1.8
18	1.2		18	1.3
19	0.0		19	0.0
20	1.8		20	0.0
21	1.4		21	0.0
22	0.0		22	0.0
23	0.0		23	0.0
24	0.0		24	0.0
25	0.0		25	0.0
26	0.0		26	0.0
27	0.0		27	0.0
28	0.0		28	0.0
29	0.0		29	0.0
30	0.0		30	0.0

4.29 FM AUDIO SCHEMATIC DIAGRAM

— DIAGRAM (1/3) —


6
5
4
3
2
1
A
B
C
TO 2 3 AV I/O
7B AUD1 SIG OUT (X)
7A AUD1 SIG OUT (G)
8B AUD2 SIG OUT (X)
8A AUD2 SIG OUT (G)
C95 10/16
C96 10/16
2/3 AUD1 ADJ OUT
3/3 A1 O. (X)
3/3 A1 O. (G)
2/3 AUD2 ADJ OUT
3/3 A2 O. (X)
3/3 A2 O. (G)
BR-S800 ONLY
3/3 REF.SIGNAL
3/3 REF-20dB SIG
A2 I. (X) 3/3
3/3 A2 I. (G)
3/3 A1 I. (X)
3/3 A1 I. (G)
FROM 2 3 AV I/O
3B AUD1 SIG IN (X)
3A AUD1 SIG IN (G)
4B AUD2 SIG IN (X)
4A AUD2 SIG IN (G)
1B LCH SIG IN (X)
1A LCH SIG IN (G)
2B RCH SIG IN (X)
2A RCH SIG IN (G)
IC3 TC4052BF
IC4 TC4052BF
0Y 2Y Y-COM 3Y 1Y INH VEE VSS
VDD 2X 1X X-COM 0X 3X A B
C8 47/16
C9 47/16
Q13
REF SW 2/3
GAIN CTL
R9 10K
RCH OUT ADJ 3/3
LCH OUT ADJ 3/3
R71 47K
R73 47K
R72 47K
R74 47K
C201 10/16
C202 10/16
IC5 M51132L
VCA1 VCA2 REF NC VCA1 /VOL CTL VCA2 /BAL CTL MODE CTL
Vcc FILTER GND PASS /VCA
C81 47/16
C82 22/16
C83 4.7/25
RCH ADJ OUT 2/3
LCH ADJ OUT 2/3
R83 10K
R85 39K
C85 47/16
R77 10K
R84 10K
C86 47/16
R78 10K
C84 47/16
R75 15K
R76 15K
R86 39K
IC6 M5218AFP
V- V+
TO 2 3 AV I/O
5B LCH SIG OUT (X)
5A LCH SIG OUT (G)
6B RCH SIG OUT (X)
6A RCH SIG OUT (G)
C87 10/16
C88 10/16
3/3 R IN LVL ADJ
3/3 ADJ CTL2
R38 4.7K
R214 3.3K
C98 10/16
IC2 JCP0038
R82 5.6K
R80 10K
C78 10/16
C76 0.01
C15 0.01
C16 0.047
R3 5.6K
R4 4.7K
D1 MA151WK
C12 100/16
C13 100/16
C17 0.01
C14 100/16
C11 47/16
C80 10/16
C79 10/16
C75 0.01
C77 10/16
R79 10K
R81 5.6K
5V VREF1 VREF2 Vcc GND
MIC MIX GND 5V
INPUT SEL REC PB
AGC LPF PEAK DET WEI-GHT VCA DE EMP PRE EMP LIMIT
NORM AUDIO SEL
MIX L/ST/R MUTE NORM/MIX HI-FI
LEVEL CTL
LPF DE MOD LIM
C36 0.01
C40 0.047
R40 510
R42 4.7K
C44 0.033
C46 10/16
C160 47/16
R150 6.8K
R44 51K
C48 220/16
R48 33K
R46 100
C38 33/10
C42 2.2/50
C50 2.2/50
C52 0.01
C54 100/16
C56 0.01
L2 100
C35 0.01
R7 0Ω
C37 33/10
C41 2.2/50
C39 0.047
R39 510
C43 0.033
R41 4.7K
R43 51K
R45 100
C47 220/16
C49 2.2/50
R47 33K
R149 8.2K
C167 47/16
C51 0.01
C53 100/16
C45 10/16
C55 0.01
L1 100
C97 10/16
R37 4.7K
R213 3.3K
3/3 ADJ CTL1
3/3 L IN LVL ADJ


2/3 12V(FIL)
5V(A)
IC1
M5278D05
VO
VI
GND
Q1
2SD973AR
R1 820
R2 820
12V
12V 10AB
FROM 6 8
REG
C7 0.01
C6 47/16
C5 0.01
C4 47/16
C3 100/16
C2 0.01
C1 100/16
GND1
GND(A) 11AB
C165 4.7/25
2/3 LNR INPUT
2/3 LNR OUTPUT
3/3 GND(NOR)
3/3 GND(LTC)
GND(A)
3/3 GND(OSC)
3/3 LTC MUTE
3/3 L:LTC PB
3/3 SEARCH1
3/3 SEARCH2
3/3 SEARCH3
C56 0.01
C60 0.0082
C66 820P
C68 0.0039
C54 100/16
L2 100
C64 0.022
R54 10K
R52 8.2K
C62 0.1
R58 6.8K
R56 10K
R-CH CARRIER
R60 68K
C52 0.01
C58 0.001
R50 100
TP2
BR-S800 ONLY
2/3 R-CH REC FM
5V
GND
LIMIT
VCO
LPF
CLI
C24 100P
R88 820
R20 3.3K
C23 100P
R87 820
C22 47/16
R19 3.3K
CLOCK
DATA
EE
3/3 5V(D)
3/3 GND(D)
3/3 CLK IN
3/3 DATA IN
RE EMP
DE EMP
TAN. PLUS
BPF2
BPF1
OUT
IN
TP4
C74 0.01
R68 2.2K
GND2
2/3 PB FM(X)
2/3 PB FM(G)
DE MOD
LIM
HOLD CTL
DOC/ MUTE
C21 0.1
R18 100K
C73 0.01
TP3
R16 OPEN
R17 10K
R15 0Ω
R14 30K
C20 560P
R13 8.2K
C19 470P
R67 2.2K
TP5
R89 10K
R12 10K
ADAPTIVE TANGENT CONTROL
NOISE DET
C18 0.1/50
R11 10K
R10 100K
C72 4.7/25
3/3 L:MUTE
3/3 AUDIO FF
3/3 H:FM DET
Q12
Q3
2SK208
C70 0.1
R8 270K
R64 680K
R62 680K
TP1
2/3 L-CH REC FM
IC7
TL082CP
C51 0.01
C57 0.001
R49 100
C61 0.1
R55 12K
R51 8.2K
L1 100
C63 0.022
R53 10K
R57 10K
L-CH CARRIER
C53 100/16
C71 47/16
R61 680K
R63 680K
Q2
2SK208
C69 0.1
C55 0.01
C59 0.0082
C65 820P
C67 0.0039
R59 68K

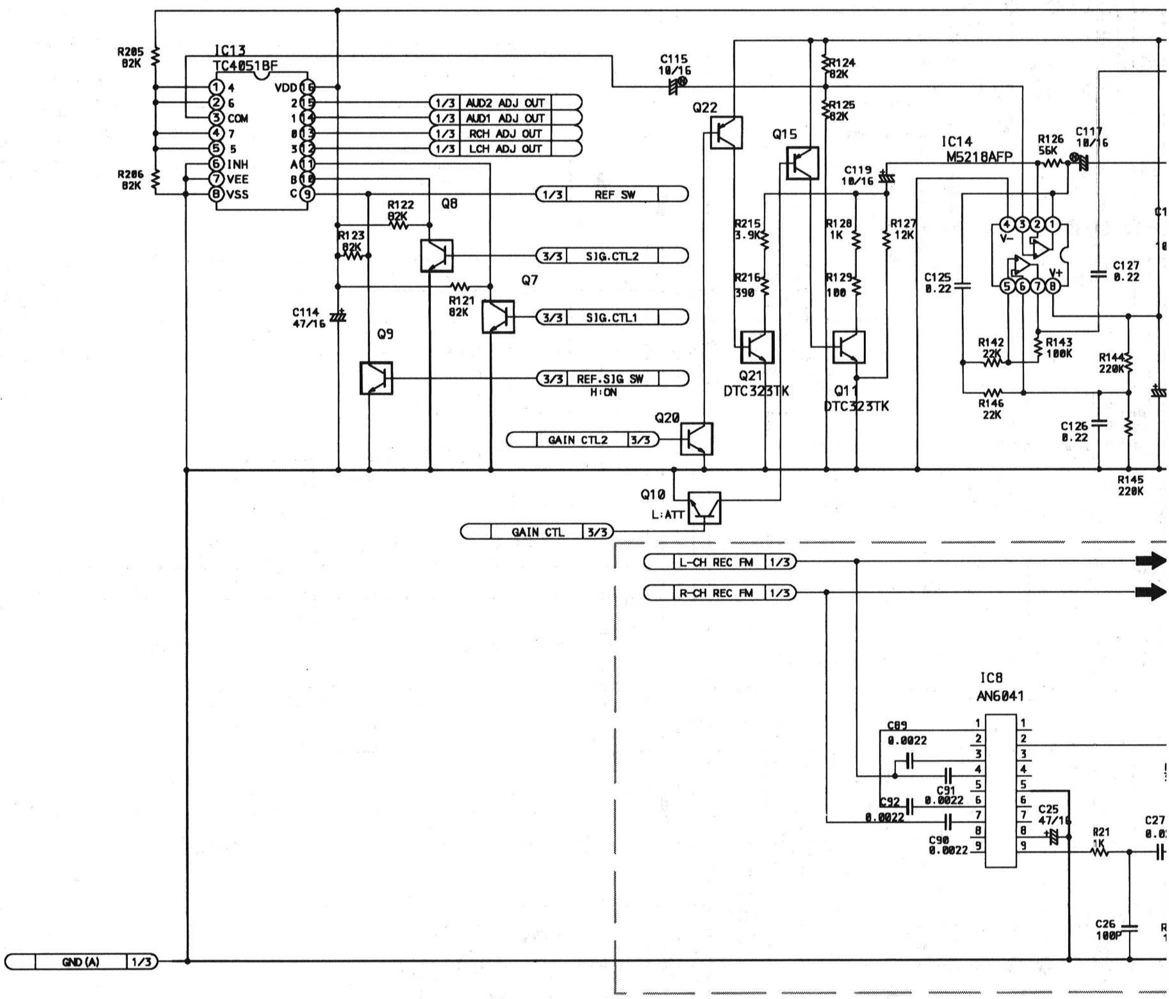
NOTE:UNLESS OTHERWISE SPECIFIED;
ALL NPN TRANSISTORS ARE 2SC2412K
ALL PNP TRANSISTORS ARE 2SA1037K
ALL NPN DIGITAL TRANSISTORS ARE DTC124EK
ALL PNP DIGITAL TRANSISTORS ARE DTA124EK
ALL DIODES ARE DA204K
ALL RESISTANCE VALUES ARE IN OHMS.(1/10W)
ALL INDUCTANCE VALUES ARE IN μH.
ALL CAPACITANCE VALUES ARE IN uF.

6

— DIAGRAM (2/3) —

5

4

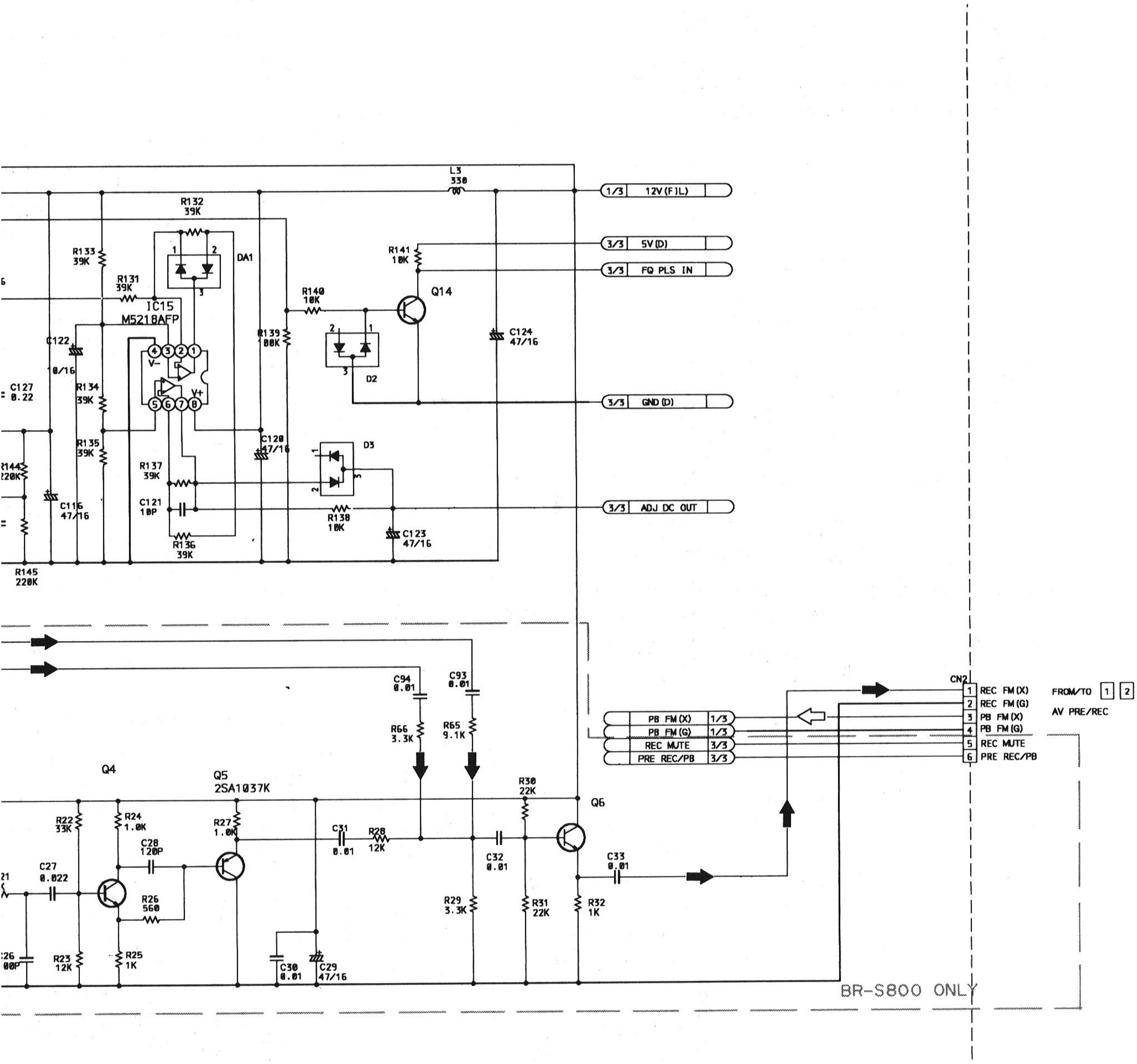

R205
82K
IC13
TC4051BF
① 4
② 6
③ COM
④ 7
⑤ 5
⑥ INH
⑦ VEE
⑧ VSS
VDD ⑯
2 ⑮
1 ⑭
0 ⑬
3 ⑫
A ⑪
B ⑩
C ⑨
R206
82K
1/3 AUD2 ADJ OUT
1/3 AUD1 ADJ OUT
1/3 RCH ADJ OUT
1/3 LCH ADJ OUT
1/3 REF SW
R122
82K
Q8
R123
82K
3/3 SIG.CTL2
R121
82K
Q7
3/3 SIG.CTL1
C114
47/16
Q9
3/3 REF.SIG SW
H:ON
Q20
GAIN CTL2 3/3
Q10
L:ATT
GAIN CTL 3/3
C115
10/16
Q22
R124
82K
R125
82K
Q15
C119
10/16
R215
3.9K
R216
390
R128
1K
R129
100
R127
12K
Q21
DTC323TK
Q11
DTC323TK
IC14
M5218AFP
R126
56K
C117
10/16
④③②①
V-
V+
⑤⑥⑦⑧
C125
0.22
C127
0.22
R142
22K
R143
100K
R144
220K
R146
22K
C126
0.22
R145
220K
L-CH REC FM 1/3
R-CH REC FM 1/3
IC8
AN6041
C89
0.0022
C91
0.0022
C92
0.0022
C90
0.0022
1
2
3
4
5
6
7
8
9
C25
47/16
R21
1K
C27
C26
100P
GND (A) 1/3

3

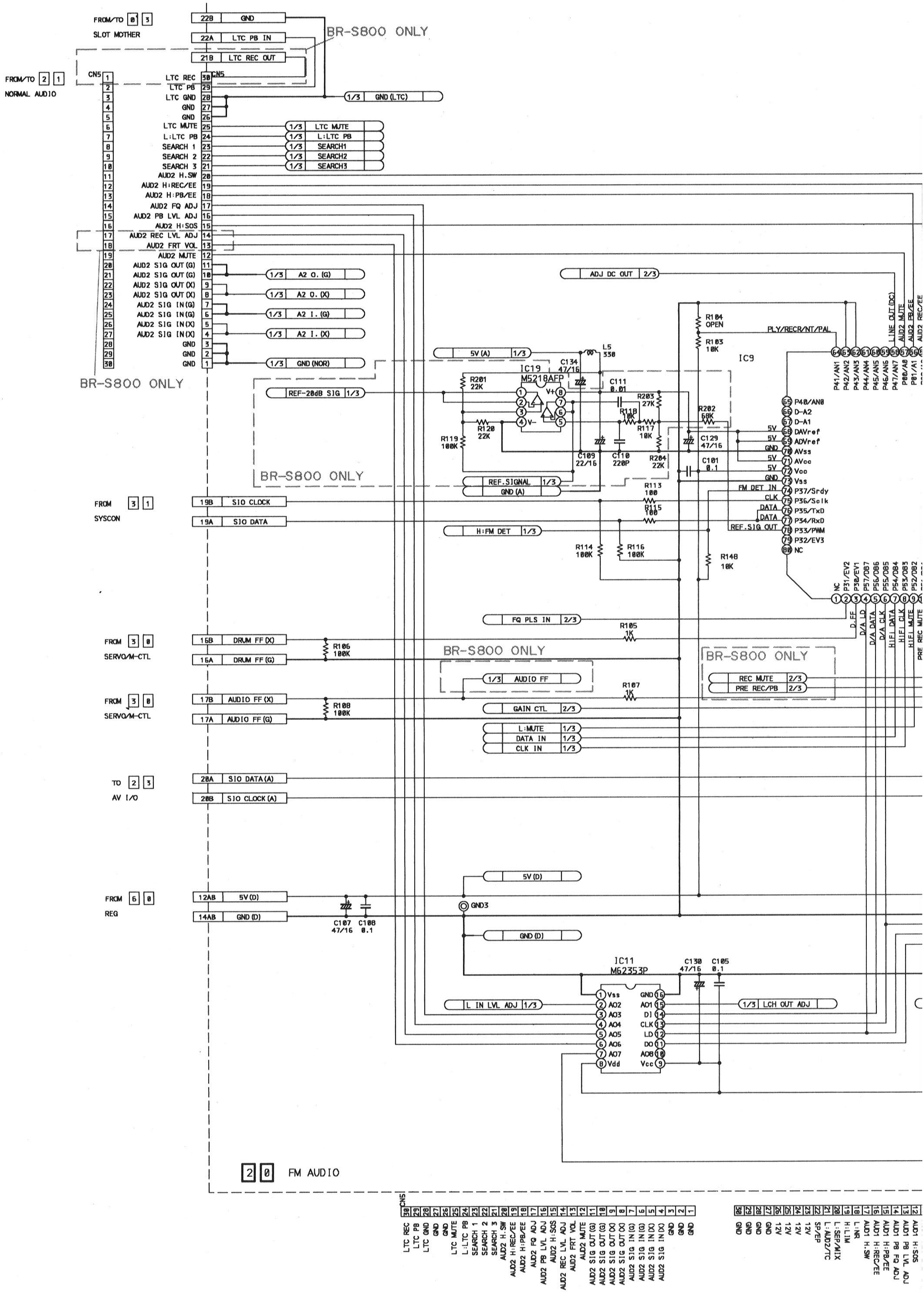
2

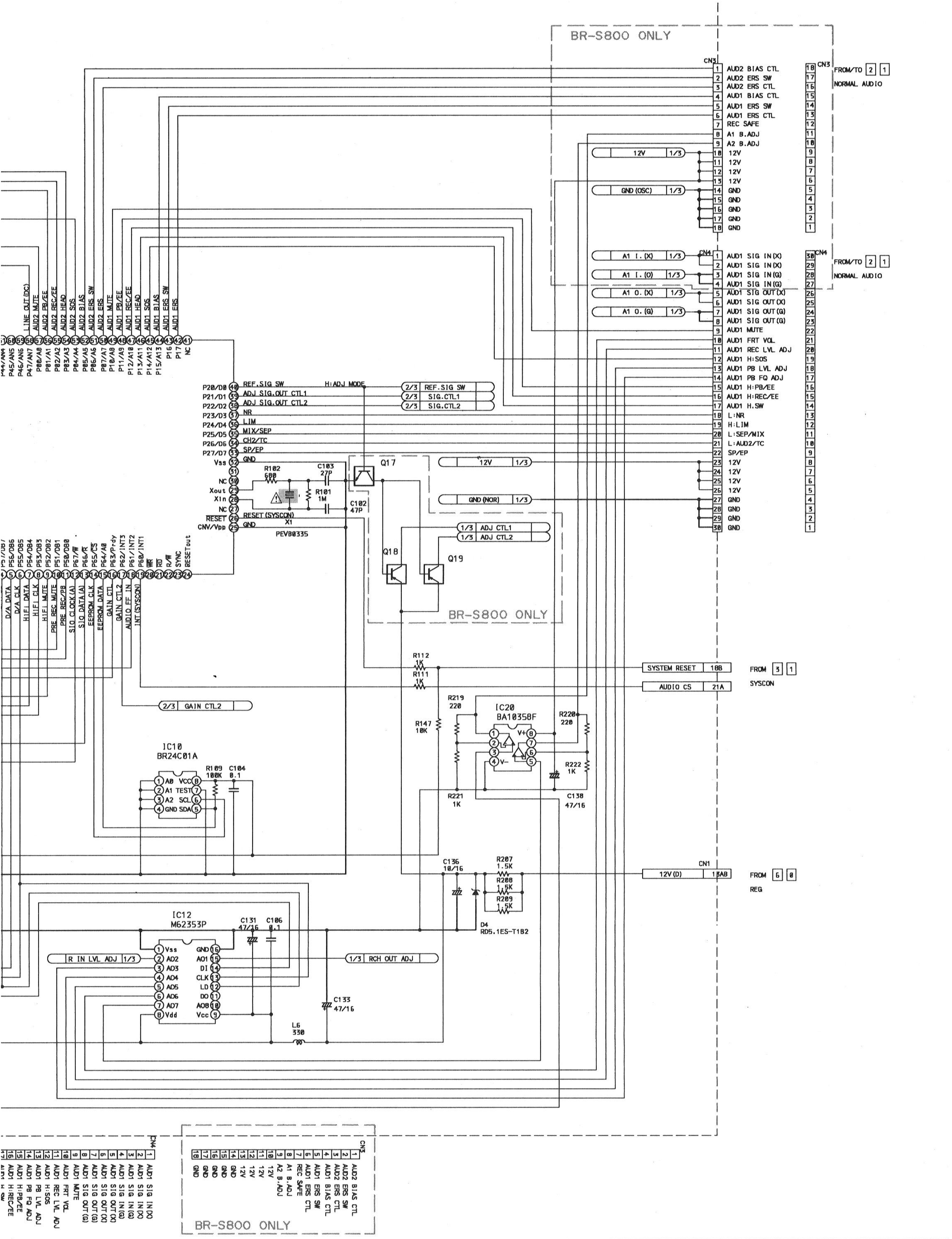
1

A B C


L3
330
1/3
12V (FIL)
R132
39K
3/3
5V (D)
R133
39K
DA1
R141
10K
3/3
FQ PLS IN
R131
39K
IC15
M5218AFP
R140
10K
Q14
C122
10/16
R139
100K
D2
C124
47/16
C127
0.22
R134
39K
V-
V+
3/3
GND (D)
R135
39K
C120
47/16
D3
R144
220K
R137
39K
C121
10P
3/3
ADJ DC OUT
C116
47/16
R138
10K
C123
47/16
R136
39K
R145
220K
C94
0.01
C93
0.01
CN2
REC FM (X)
REC FM (G)
PB FM (X)
PB FM (G)
REC MUTE
PRE REC/PB
FROM/TO 1 2
AV PRE/REC
PB FM (X)
PB FM (G)
REC MUTE
PRE REC/PB
1/3
1/3
3/3
3/3
R66
3.3K
R65
9.1K
Q4
Q5
2SA1037K
R30
22K
Q6
R22
33K
R24
1.0K
R27
1.0K
C28
120P
C31
0.01
R28
12K
C32
0.01
C27
0.022
C33
0.01
R26
560
R29
3.3K
R31
22K
R32
1K
C26
00P
R23
12K
R25
1K
C30
0.01
C29
47/16
BR-S800 ONLY

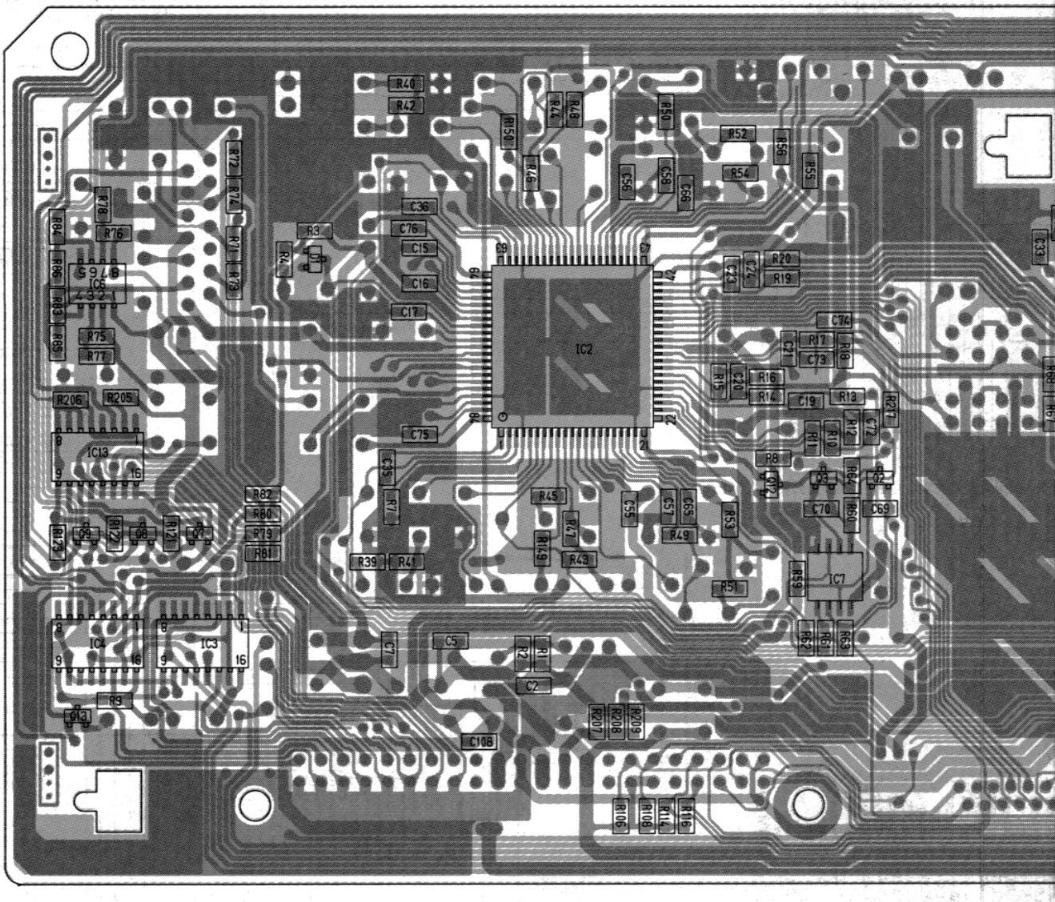
— DIAGRAM (3/3) —


FROM/TO 0 3
SLOT MOTHER
22B GND
22A LTC PB IN
21B LTC REC OUT
BR-S800 ONLY
FROM/TO 2 1
NORMAL AUDIO
CN5
LTC REC 30
LTC PB 29
LTC GND 28
GND 27
GND 26
LTC MUTE 25
L:LTC PB 24
SEARCH 1 23
SEARCH 2 22
SEARCH 3 21
AUD2 H.SW 20
AUD2 H:REC/EE 19
AUD2 H:PB/EE 18
AUD2 FQ ADJ 17
AUD2 PB LVL ADJ 16
AUD2 H:SOS 15
AUD2 REC LVL ADJ 14
AUD2 FRT VOL 13
AUD2 MUTE 12
AUD2 SIG OUT (G) 11
AUD2 SIG OUT (G) 10
AUD2 SIG OUT (X) 9
AUD2 SIG OUT (X) 8
AUD2 SIG IN (G) 7
AUD2 SIG IN (G) 6
AUD2 SIG IN (X) 5
AUD2 SIG IN (X) 4
GND 3
GND 2
GND 1
1/3 GND (LTC)
1/3 LTC MUTE
1/3 L:LTC PB
1/3 SEARCH1
1/3 SEARCH2
1/3 SEARCH3
1/3 A2 O. (G)
1/3 A2 O. (X)
1/3 A2 I. (G)
1/3 A2 I. (X)
1/3 GND (NOR)
BR-S800 ONLY
ADJ DC OUT 2/3
5V (A) 1/3
L5 330
C134 47/16
IC19 M5218AFP
R201 22K
REF-20dB SIG 1/3
C111 0.01
R203 27K
R118 10K
R117 10K
R120 22K
R119 100K
C109 22/16
C110 220P
R204 22K
BR-S800 ONLY
REF.SIGNAL 1/3
GND (A)
R104 OPEN
R103 10K
R202 68K
C129 47/16
C101 0.1
PLY/RECR/NT/PAL
IC9
LINE OUT(DC)
AUD2 MUTE
AUD2 PB/EE
AUD2 REC/EE
P41/AN1 P42/AN2 P43/AN3 P44/AN4 P45/AN5 P46/AN6 P47/AN7 P00/A0 P01/A1
65 P40/AN0
66 D-A2
67 D-A1
5V 68 DAVref
5V 69 ADVref
GND 70 AVss
5V 71 AVcc
5V 72 Vcc
GND 73 Vss
FM DET IN 74 P37/Srdy
CLK 75 P36/Sclk
DATA 76 P35/TxD
DATA 77 P34/RxD
REF.SIG OUT 78 P33/PWM
79 P32/EV3
80 NC
FROM 3 1
SYSCON
19B SIO CLOCK
19A SIO DATA
R113 100
R115 100
H:FM DET 1/3
R114 100K
R116 100K
R148 10K
NC P31/EV2 P30/EV1 P57/DB7 P56/DB6 P55/DB5 P54/DB4 P53/DB3 P52/DB2
D.FF D/A LD D/A DATA D/A CLK HIFI DATA HIFI CLK HIFI MUTE PRE REC MUTE
FQ PLS IN 2/3
R105 1K
FROM 3 0
SERVO/M-CTL
16B DRUM FF (X)
16A DRUM FF (G)
R106 100K
BR-S800 ONLY
1/3 AUDIO FF
BR-S800 ONLY
REC MUTE 2/3
PRE REC/PB 2/3
R107 1K
FROM 3 0
SERVO/M-CTL
17B AUDIO FF (X)
17A AUDIO FF (G)
R108 100K
GAIN CTL 2/3
L:MUTE 1/3
DATA IN 1/3
CLK IN 1/3
TO 2 3
AV I/O
20A SIO DATA (A)
20B SIO CLOCK (A)
5V (D)
FROM 6 0
REG
12AB 5V (D)
14AB GND (D)
GND3
C107 47/16
C108 0.1
GND (D)
IC11 M62353P
C130 47/16
C105 0.1
L IN LVL ADJ 1/3
1 Vss GND 16
2 AO2 AO1 15
3 AO3 DI 14
4 AO4 CLK 13
5 AO5 LD 12
6 AO6 DO 11
7 AO7 AO8 10
8 Vdd Vcc 9
1/3 LCH OUT ADJ
2 0 FM AUDIO
CN5
30 LTC REC
29 LTC PB
28 LTC GND
27 GND
26 GND
25 LTC MUTE
24 L:LTC PB
23 SEARCH 1
22 SEARCH 2
21 SEARCH 3
20 AUD2 H.SW
19 AUD2 H:REC/EE
18 AUD2 H:PB/EE
17 AUD2 FQ ADJ
16 AUD2 PB LVL ADJ
15 AUD2 H:SOS
14 AUD2 REC LVL ADJ
13 AUD2 FRT VOL
12 AUD2 MUTE
11 AUD2 SIG OUT (G)
10 AUD2 SIG OUT (G)
9 AUD2 SIG OUT (X)
8 AUD2 SIG OUT (X)
7 AUD2 SIG IN (G)
6 AUD2 SIG IN (G)
5 AUD2 SIG IN (X)
4 AUD2 SIG IN (X)
3 GND
2 GND
1 GND
30 GND
29 GND
28 GND
27 GND
26 12V
25 12V
24 12V
23 12V
22 SP/EP
21 L:AUD2/TC
20 L:SEP/MIX
19 H:LIM
18 L:NR
17 AUD1 H:SW
16 AUD1 H:REC/EE
15 AUD1 H:PB/EE
14 AUD1 FQ ADJ
13 AUD1 PB LVL ADJ
12 AUD1 H:SOS
6 5 4 3 2 1
A B C

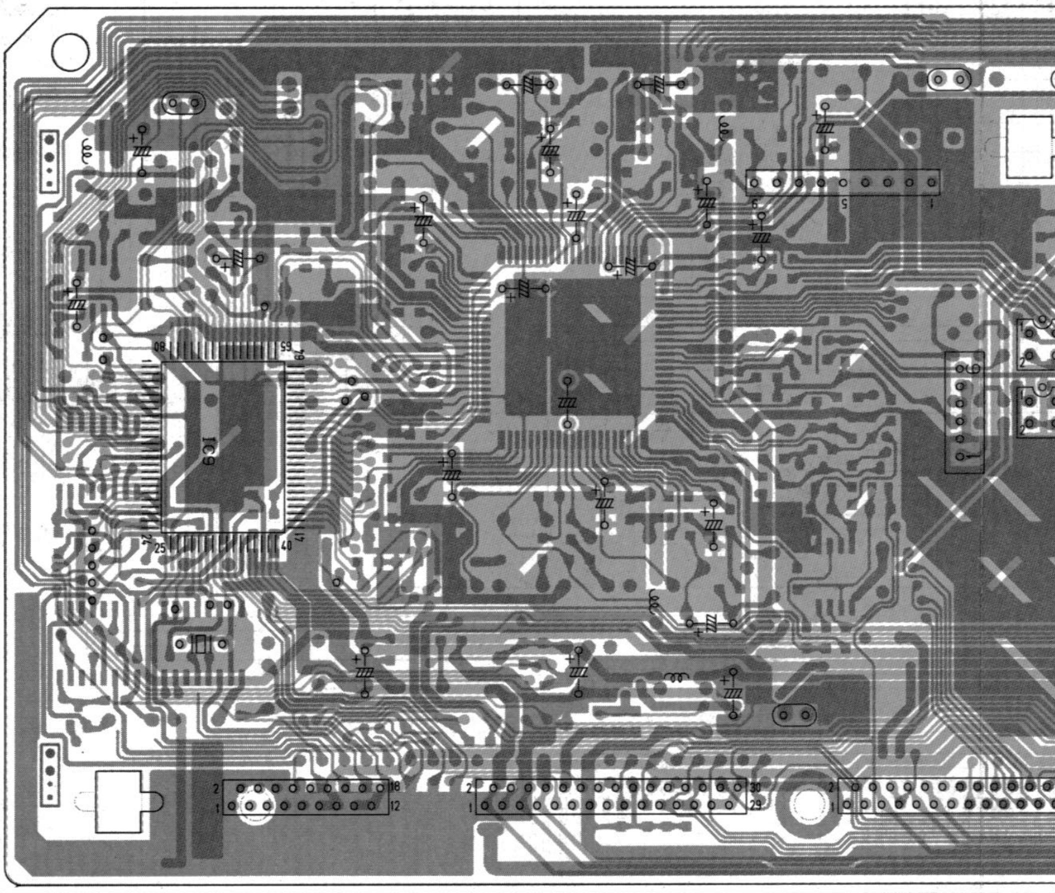

BR-S800 ONLY
CN3
AUD2 BIAS CTL
AUD2 ERS SW
AUD2 ERS CTL
AUD1 BIAS CTL
AUD1 ERS SW
AUD1 ERS CTL
REC SAFE
A1 B.ADJ
A2 B.ADJ
12V
GND
FROM/TO 2 1
NORMAL AUDIO
12V 1/3
GND (OSC) 1/3
CN4
AUD1 SIG IN (X)
AUD1 SIG IN (G)
AUD1 SIG OUT (X)
AUD1 SIG OUT (G)
AUD1 MUTE
AUD1 FRT VOL
AUD1 REC LVL ADJ
AUD1 H:SOS
AUD1 PB LVL ADJ
AUD1 PB FQ ADJ
AUD1 H:PB/EE
AUD1 H:REC/EE
AUD1 H.SW
L:NR
H:LIM
L:SEP/MIX
L:AUD2/TC
SP/EP
A1 I.(X) 1/3
A1 I.(O) 1/3
A1 O.(X) 1/3
A1 O.(G) 1/3
LINE OUT (DC)
AUD2 MUTE
AUD2 PB/EE
AUD2 REC/EE
AUD2 HEAD
AUD2 SOS
AUD2 BIAS
AUD2 ERS SW
AUD2 ERS
AUD1 MUTE
AUD1 PB/EE
AUD1 REC/EE
AUD1 HEAD
AUD1 SOS
AUD1 BIAS
AUD1 ERS SW
AUD1 ERS
P44/AN4
P45/AN5
P46/AN6
P47/AN7
P00/A0
P01/A1
P02/A2
P03/A3
P04/A4
P05/A5
P06/A6
P07/A7
P10/A8
P11/A9
P12/A10
P13/A11
P14/A12
P15/A13
P16
P17
NC
P20/D0
P21/D1
P22/D2
P23/D3
P24/D4
P25/D5
P26/D6
P27/D7
Vss
NC
Xout
Xin
NC
RESET
CNV/Vpp
REF.SIG SW
ADJ SIG.OUT CTL1
ADJ SIG.OUT CTL2
NR
LIM
MIX/SEP
CH2/TC
SP/EP
GND
RESET (SYSCON)
H:ADJ MODE
2/3 REF.SIG SW
2/3 SIG.CTL1
2/3 SIG.CTL2
R102 680
C103 27P
R101 1M
C102 47P
X1
PEVB0335
Q17
Q18
Q19
12V 1/3
GND (NOR) 1/3
1/3 ADJ CTL1
1/3 ADJ CTL2
P57/D87
P56/D86
P55/D85
P54/D84
P53/D83
P52/D82
P51/D81
P50/D80
P67/W
P66/R
P65/CS
P64/A0
P63/Prdy
P62/INT3
P61/INT2
P60/INT1
WR
RD
R/W
SYNC
RESETout
D/A DATA
D/A CLK
HIFI DATA
HIFI CLK
HIFI MUTE
PRE REC MUTE
PRE REC/PB
SIG CLOCK (A)
SIG DATA (A)
EEPROM CLK
EEPROM DATA
GAIN CTL
GAIN CTL2
AUDIO FF IN
INT (SYSCON)
R112 1K
R111 1K
SYSTEM RESET 18B
FROM 3 1
AUDIO CS 21A
SYSCON
2/3 GAIN CTL2
R219 220
R147 10K
IC20
BA10358F
R220 220
R222 1K
R221 1K
C138 47/16
V+
V-
IC10
BR24C01A
A0 VCC
A1 TEST
A2 SCL
GND SDA
R109 100K
C104 0.1
C136 10/16
R207 1.5K
R208 1.5K
R209 1.5K
D4
RD5.1ES-T1B2
CN1
12V (D) 15AB
FROM 6 0
REG
IC12
M62353P
C131 47/16
C106 0.1
Vss
AO2
AO3
AO4
AO5
AO6
AO7
Vdd
GND
AO1
DI
CLK
LD
DO
AO8
Vcc
R IN LVL ADJ 1/3
1/3 RCH OUT ADJ
C133 47/16
L6 330
AUD1 SIG IN (X)
AUD1 SIG IN (G)
AUD1 SIG OUT (X)
AUD1 SIG OUT (G)
AUD1 MUTE
AUD1 FRT VOL
AUD1 REC LVL ADJ
AUD1 H:SOS
AUD1 PB LVL ADJ
AUD1 PB FQ ADJ
AUD1 H:PB/EE
AUD1 H:REC/EE
AUD2 BIAS CTL
AUD2 ERS SW
AUD2 ERS CTL
AUD1 BIAS CTL
AUD1 ERS SW
AUD1 ERS CTL
REC SAFE
A1 B.ADJ
A2 B.ADJ
12V
GND
BR-S800 ONLY
E
F
G
H

4.30 FM AUDIO CIRCUIT BOARD

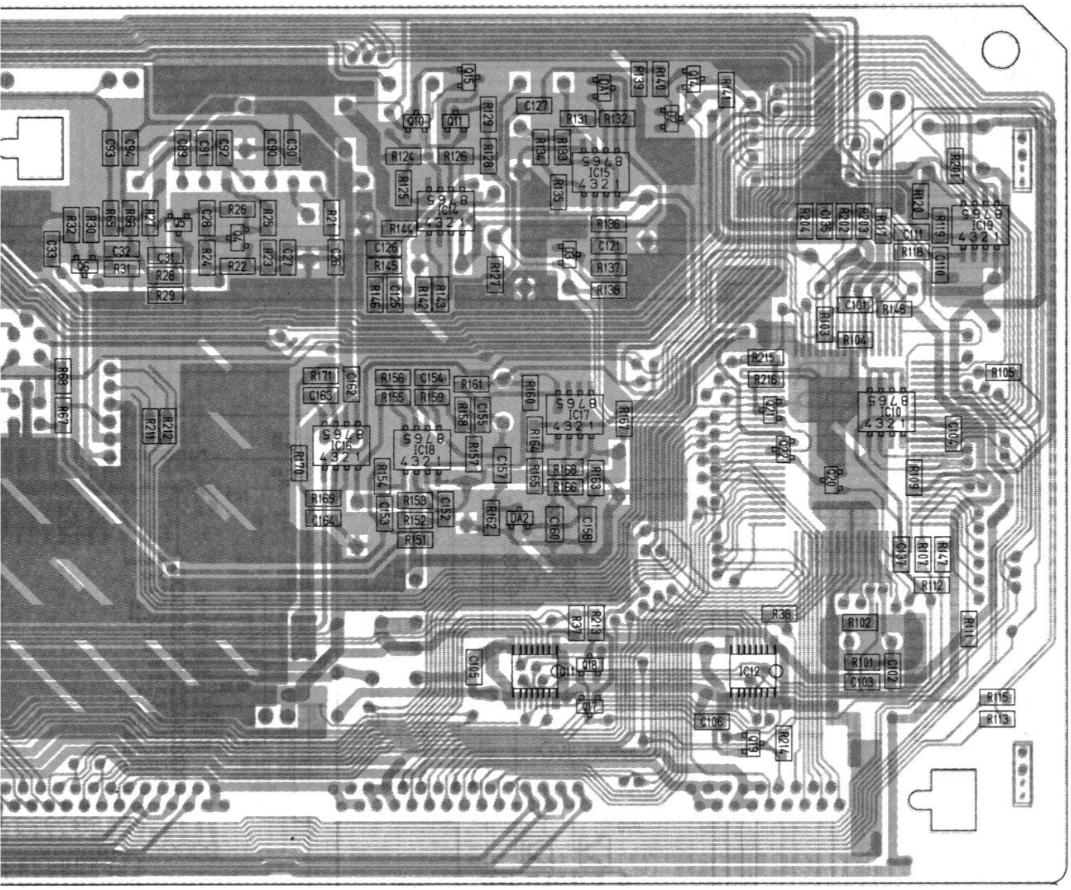
— SOLDER Side


R40
R42
R150
R44
R48
R46
R50
C56
C58
C66
R52
R54
R56
R55
R72
R74
R71
R73
R78
R84
R76
R86
IC6
R83
R85
R75
R77
R3
R4
Q1
C36
C76
C15
C16
C17
C9
C7
IC2
C23
C24
R20
R19
C74
C21
R17
R18
C73
R15
C20
R16
R14
C19
R13
R217
R11
R10
R12
C72
R8
Q2
R64
C70
R60
C69
C33
R206
R205
IC13
C75
C35
R7
R82
R80
R79
R81
R125
Q9
R122
Q8
R121
Q7
R39
R41
R45
R47
R149
R43
C55
C57
C65
R49
R53
R51
R59
IC7
R62
R61
R63
IC4
IC3
C7
C5
R2
R1
C2
R9
Q13
R207
R208
R209
C108
R106
R108
R114
R116

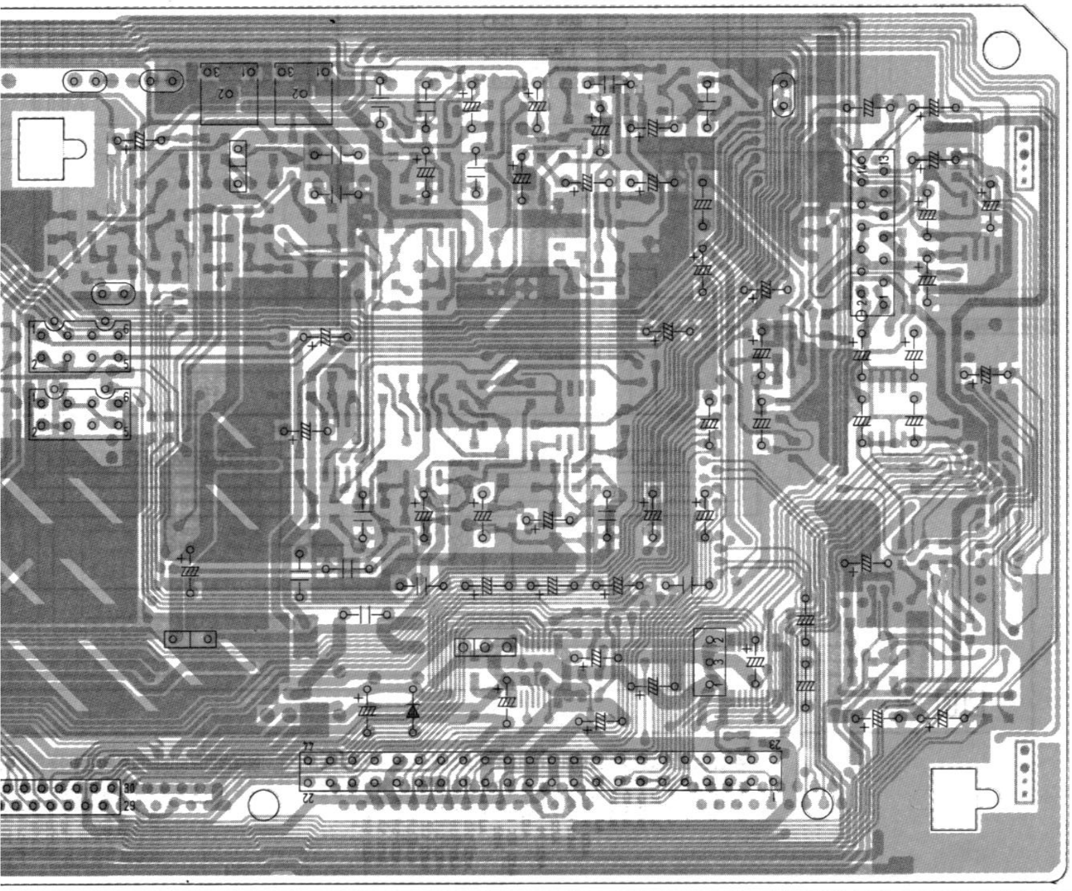
— PARTS Side


IC9
80
65
79
25
40
41
2
18
1
12
2
30
1
29
6
5
1

Side —


Q15
R139
R140
Q14
R141
DA1
C127
Q10
Q11
R129
R131
R132
R124
R126
R128
R134
R133
IC15
R135
R125
IC14
R144
R136
C121
R137
R138
C126
R145
C125
R146
R142
R143
R127
C93
C94
C89
C91
C92
C90
C30
R32
R30
R65
R66
R27
C28
R26
R25
R21
C33
C32
R31
C31
R28
R29
R24
R22
R23
C27
C26
Q6
Q4
R201
R120
R204
C115
R202
R203
R117
C111
R119
IC19
R118
C110
C101
R148
R103
R104
R215
R216
R105
Q21
IC10
Q22
Q20
C104
R109
R171
C162
C163
R156
C154
R161
R155
R159
R158
C155
R160
IC17
R167
IC16
IC18
R170
R154
R157
C151
R164
R165
R168
R166
R163
R169
C164
C153
R150
R152
C152
R151
R162
DA2
C160
C158
Q31
R107
R147
R112
R38
R102
R111
R37
R213
C105
Q18
IC11
Q17
IC12
R101
C102
C109
C106
Q19
R214
R115
R113
R88
R67
R211
R212

Side —


Q2
Q2
30
29
22

(PRK10171-01-03)

— DC Voltage (1/2) —

SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC1	1	11.1	11.0
	2	0.0	0.0
	3	5.1	5.1
IC2	1	2.6	2.6
	2	3.0	3.1
	3	0.0	0.0
	4	0.0	0.0
	5	2.2	2.5
	6	1.5	1.5
	7	2.6	2.6
	8	2.6	2.5
	9	2.6	2.6
	10	2.5	2.5
	11	2.5	2.6
	12	2.6	2.5
	13	2.6	2.5
	14	5.1	5.1
	15	—	2.5
	16	—	2.6
	17	—	2.6
	18	—	2.5
	19	2.4	2.4
	20	—	0.0
	21	2.6	—
	22	0.0	0.2
	23	—	0.1
	24	3.5	3.3
	25	—	3.4
	26	0.0	0.0
	27	2.4	2.4
	28	5.1	0.1
	29	0.0	0.0
	30	0.0	2.6
	31	5.2	0.7
	32	5.2	5.2
	33	0.1	2.6
	34	10.2	10.1
	35	0.1	0.1
	36	10.2	10.0
	37	0.1	0.1
	38	0.0	0.0
	39	0.1	0.2
	40	2.6	0.1
	41	0.1	0.1
	42	3.1	0.0
	43	1.9	0.2
	44	0.0	0.0
	45	2.4	2.4
	46	2.3	2.3
	47	—	2.5
	48	—	2.5
	49	—	2.6
	50	5.1	5.1
	51	2.6	2.5
	52	2.6	2.5
	53	2.6	2.6
	54	2.5	2.5
	55	2.6	2.6
	56	2.6	2.5
	57	2.6	2.6
	58	1.5	1.5
	59	2.6	2.5
	60	0.0	0.0
	61	2.9	2.9
	62	1.9	2.5
	63	2.6	2.6
	64	2.6	2.8
	65	—	9.5
	66	2.6	2.7
	67	2.8	2.8
	68	2.0	2.0
	69	2.5	2.8
	70	5.1	5.1
	71	2.6	2.6
	72	0.7	3.6
	73	5.8	5.8
	74	11.0	11.0
	75	0.0	1.5
	76	5.8	5.7
	77	5.7	5.7
	78	5.8	3.1
	79	5.7	5.7
	80	5.7	5.7
	81	—	0.0
	82	1.1	—
	83	0.6	2.6
	84	—	—
IC3	1	2.5	2.5
	2	1.9	1.9
	3	5.7	5.7
	4	0.8	1.6
	5	5.7	5.7
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	0.0	0.0
	10	10.9	9.2
	11	0.8	1.5
	12	2.5	2.5
	13	5.7	5.7
	14	5.7	5.7
	15	1.9	1.9
	16	11.0	11.0
IC4	1	2.5	2.5
	2	1.9	1.9
	3	5.2	5.3
	4	0.5	3.3
	5	5.3	5.3
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	0.0	0.0
	10	10.7	10.2
	11	1.9	3.1
	12	2.5	2.5
	13	5.2	5.2
	14	5.2	5.3
	15	1.9	1.9
	16	11.0	11.0
IC5	1	11.0	11.0
	2	4.4	4.9
	3	4.4	4.4
	4	5.6	5.6
	5	10.9	10.7
	6	0.0	1.2
	7	0.0	0.0
	8	3.3	3.4
	9	0.0	0.1
	10	3.3	3.3
	11	0.0	0.0
	12	0.0	0.0
	13	4.4	4.4
	14	4.8	4.5
IC6	1	5.7	5.7
	2	5.8	5.7
	3	5.8	5.8
	4	0.0	0.0
	5	5.8	5.7
	6	5.8	5.8
	7	5.8	5.8
	8	11.0	11.0
IC7	1	2.6	2.6
	2	2.6	2.6
	3	2.4	2.4
	4	0.0	0.0
	5	2.6	2.4
	6	2.6	2.6
	7	2.6	2.6
	8	5.1	5.1
IC8	1	8.2	7.9
	2	11.1	11.0
	3	2.6	2.6
	4	7.4	7.5
	5	0.0	0.0
	6	7.4	7.5
	7	2.6	2.6
	8	7.5	7.5
	9	7.9	7.9
IC9	1	0.0	1.3
	2	5.2	5.2
	3	2.4	2.4
	4	0.0	0.0
	5	0.2	0.3
	6	4.5	4.5
	7	0.0	0.0
	8	0.1	0.1
	9	5.2	5.2
	10	5.2	5.2
	11	0.0	0.0
	12	0.0	0.0
	13	0.0	0.0
	14	5.2	5.2
	15	5.2	5.2
	16	5.2	5.2
	17	2.4	2.4
	18	2.4	2.4
	19	2.5	2.5
	20	5.0	5.0
	21	3.3	3.3
	22	4.8	4.8
	23	1.4	1.4
	24	0.0	0.0
	25	0.0	0.0
	26	5.2	5.2
	27	0.0	0.0
	28	2.6	2.6
	29	2.3	2.6
	30	0.0	0.0
	31	2.6	2.6
	32	0.0	0.0
	33	0.0	0.0
	34	0.0	0.0
	35	0.0	0.0
	36	5.2	5.2
	37	0.0	0.0
	38	0.0	0.0
	39	0.0	0.0
	40	0.0	0.0
	41	—	0.0
	42	5.2	0.0
	43	5.2	0.0
	44	5.1	0.0
	45	0.0	0.0
	46	5.2	0.0
	47	5.2	0.0
	48	0.0	0.0
	49	0.0	0.0
	50	5.2	0.0
	51	5.2	0.0
	52	5.1	0.0
	53	0.0	0.0
	54	5.2	0.0
	55	5.2	0.0
	56	0.0	0.0
	57	0.0	0.0
	58	2.3	1.9
	59	1.2	1.3
	60	1.2	1.5
	61	1.1	1.4
	62	0.0	0.0
	63	0.0	0.0
	64	0.0	0.5
	65	—	—
	66	2.5	2.5
	67	2.5	1.9
	68	5.0	5.0
	69	5.0	5.0
	70	0.0	0.0
	71	5.0	5.0
	72	5.2	5.2
	73	0.0	0.0
	74	0.1	2.8
	75	5.0	2.6
	76	4.2	4.0
	77	4.1	4.1
	78	0.0	0.0
	79	1.5	—
	80	1.3	1.7
IC10	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	5.2	5.2
	6	5.2	5.2
	7	0.0	0.0
	8	5.2	5.2
IC11	1	0.0	0.0
	2	3.1	3.1
	3	2.0	3.5
	4	1.2	1.2
	5	1.8	2.3
	6	2.1	2.2
	7	3.2	4.5
	8	5.1	5.1
	9	5.1	5.1
	10	0.0	0.0
	11	4.1	4.2
	12	0.0	0.0
	13	4.5	4.6
	14	0.2	0.2
	15	1.0	1.3
	16	0.0	0.0
IC12	1	0.0	0.0
	2	2.9	3.1
	3	2.2	1.3
	4	1.2	0.9
	5	1.8	0.3
	6	2.0	2.1
	7	3.2	5.1
	8	5.1	5.1
	9	5.1	5.1
	10	0.0	0.0
	11	4.1	4.2
	12	0.0	0.0
	13	4.5	—
	14	4.1	—
	15	1.0	1.1
	16	0.0	0.0
IC13	1	5.3	5.5
	2	5.5	5.5
	3	5.5	5.5
	4	5.5	5.5
	5	5.5	5.4
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	10.9	10.6
	10	10.9	10.6
	11	10.9	10.6
	12	5.6	5.6
	13	5.5	5.6
	14	5.5	5.6
	15	5.5	5.6
	16	11.0	11.0
IC14	1	5.5	5.5
	2	5.5	5.5
	3	5.2	5.4
	4	0.0	0.0
	5	2.8	2.9
	6	7.0	3.6
	7	10.3	1.3
	8	11.0	11.0
IC15	1	8.0	8.0
	2	7.3	7.3
	3	7.3	7.2
	4	0.0	0.0
	5	3.7	3.6
	6	3.7	3.7
	7	1.9	1.9
	8	11.0	1.3
IC19	1	2.5	2.5
	2	2.5	2.5
	3	2.5	2.5
	4	0.0	0.0
	5	1.9	1.9
	6	1.9	1.9
	7	1.9	1.9
	8	5.0	5.0
TRANSISTOR			
Q1	B	11.7	11.7
	C	12.0	12.1
	E	11.0	11.0
Q2	B	2.6	2.6
	C	3.1	3.1
	E	2.6	2.6
Q3	B	2.6	2.6
	C	3.1	3.1
	E	2.6	2.6
Q4	B	2.8	2.8
	C	8.9	8.9
	E	2.2	2.2
Q5	B	2.2	2.3
	C	0.0	0.0
	E	2.9	2.9
Q6	B	5.3	5.3
	C	11.0	11.0
	E	4.6	2.7

— DC Voltage (2/2) —

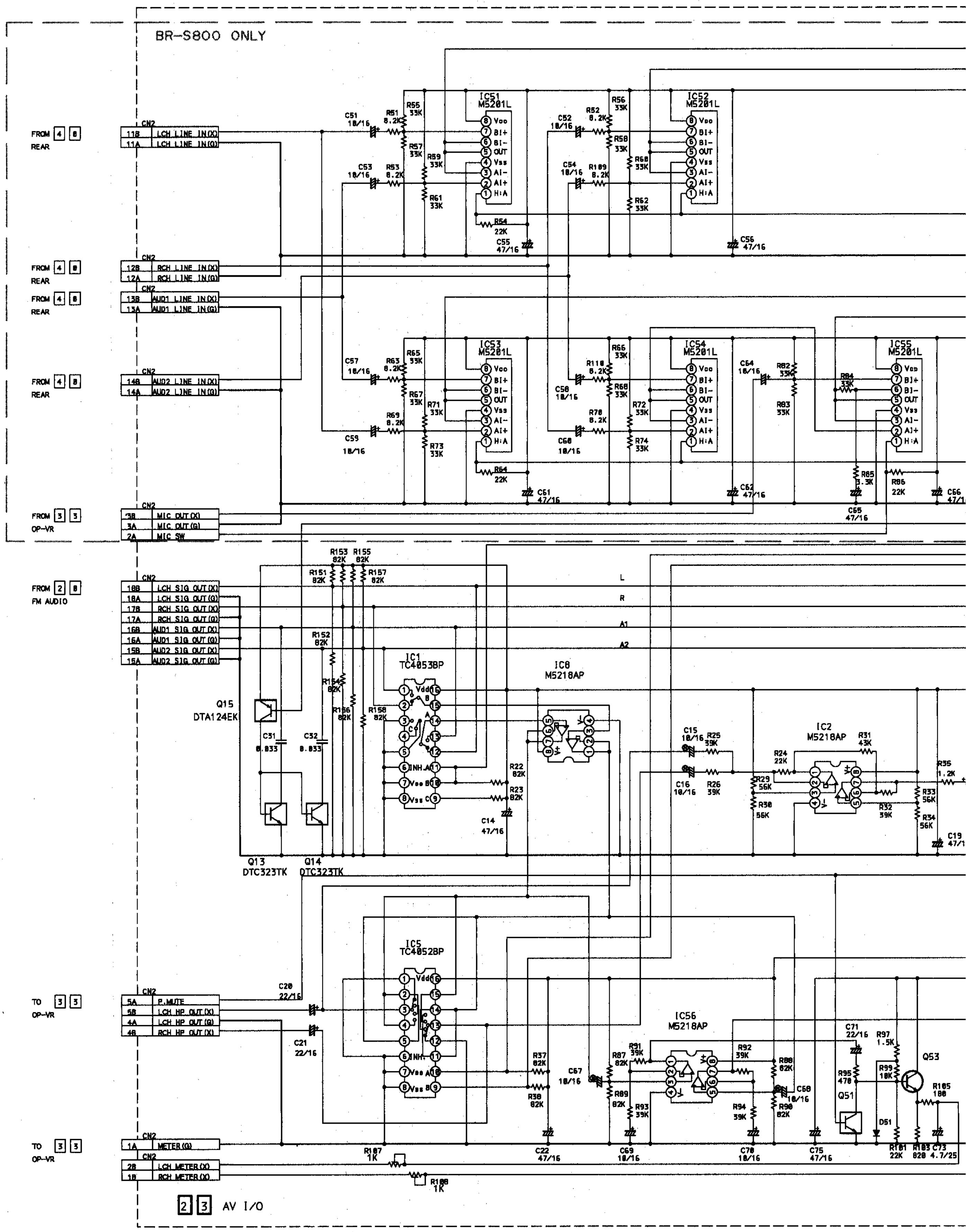
SYMBOL	No.	REC	PB
Q7	B	0.0	0.0
	C	9.5	10.8
	E	0.0	0.0
Q8	B	0.0	0.0
	C	9.5	10.8
	E	0.0	0.0
Q9	B	0.0	0.0
	C	9.6	10.8
	E	0.0	0.0
Q10	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q11	B	10.9	10.9
	C	0.0	0.0
	E	0.0	0.0
Q12	B	0.1	0.2
	C	3.1	3.1
	E	0.0	0.0
Q13	B	5.2	5.2
	C	0.0	0.0
	E	0.0	0.0
Q14	B	0.0	0.0
	C	5.2	5.2
	E	0.0	0.0
Q15	B	0.0	0.0
	C	10.9	10.9
	E	11.0	11.0
Q17	B	0.0	0.0
	C	5.0	5.1
	E	0.0	0.0
Q18	B	5.0	5.1
	C	3.0	3.1
	E	5.1	5.1
Q19	B	5.1	5.1
	C	3.0	3.1
	E	5.1	5.1
CONNECTOR			
CN1	1A	0.0	0.0
	1B	5.3	0.0
	2A	0.0	0.0
	2B	5.2	5.2
	3A	0.0	0.0
	3B	5.7	5.7
	4A	0.0	0.0
	4B	5.7	5.7
	5A	0.0	0.0
	5B	5.5	5.5
	6A	0.0	0.0
	6B	5.5	5.5
	7A	0.0	0.0
	7B	5.6	5.5
	8A	0.0	0.0
	8B	5.6	5.5
	9A	5.3	5.3
	9B	5.3	5.3
	10A	12.1	12.1
	10B	12.1	12.1
	11A	0.0	0.0
	11B	0.0	0.0
	12A	5.2	5.2
	12B	5.2	5.2
	13A	12.9	12.9
	13B	12.9	12.9
	14A	0.0	0.0
	14B	0.0	0.0
	15A	4.6	1.2
	15B	4.6	1.2
	16A	0.0	0.0
	16B	2.4	2.4
	17A	0.0	0.0
	17B	2.4	2.4
	18A	4.5	0.7
	18B	5.2	5.2
	19A	4.1	4.1
	19B	5.0	5.0
	20A	0.0	0.0
	20B	0.0	0.0

SYMBOL	No.	REC	PB
	21A	2.5	2.6
	21B	3.3	2.1
	22A	0.0	0.0
	22B	0.0	0.0
CN2	1	2.8	2.9
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	0.0	5.2
	6	5.0	0.0
CN3	1	5.1	0.0
	2	5.2	0.0
	3	5.2	0.0
	4	5.1	0.0
	5	5.2	0.0
	6	5.2	0.0
	7	—	0.9
	8	4.5	4.5
	9	5.1	5.1
	10	12.0	12.1
	11	12.0	12.1
	12	12.0	12.1
	13	12.0	12.1
	14	0.0	0.0
	15	0.0	0.0
	16	0.0	0.0
	17	0.0	0.0
	18	0.0	0.0
CN4	1	5.7	5.7
	2	5.7	5.7
	3	0.8	0.0
	4	0.8	0.0
	5	—	0.2
	6	—	0.1
	7	0.0	0.0
	8	0.0	0.0
	9	0.0	0.7
	10	2.0	2.1
	11	2.3	2.3
	12	0.0	0.0
	13	0.9	0.9
	14	1.2	1.3
	15	0.0	5.2
	16	5.2	0.0
	17	5.2	0.0
	18	0.0	0.0
	19	5.2	5.2
	20	0.0	0.0
	21	—	0.0
	22	0.0	0.0
	23	12.0	12.1
	24	12.0	12.1
	25	12.0	12.1
	26	12.0	12.1
	27	0.0	0.0
	28	0.0	0.0
	29	0.0	0.0
	30	0.0	0.0
CN5	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	5.7	5.7
	5	5.7	5.7
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	0.0	0.1
	10	0.0	0.0
	11	0.0	0.0
	12	0.0	0.0
	13	2.2	2.2
	14	2.3	2.3
	15	0.0	0.0
	16	1.2	1.2
	17	3.5	3.5
	18	0.0	5.2
	19	5.2	0.0
	20	5.2	0.0
	21	10.2	9.1
	22	0.1	0.1
	23	10.2	9.2
	24	0.1	0.1
	25	0.0	0.0
	26	0.0	0.0
	27	0.0	0.0
	28	0.0	0.0

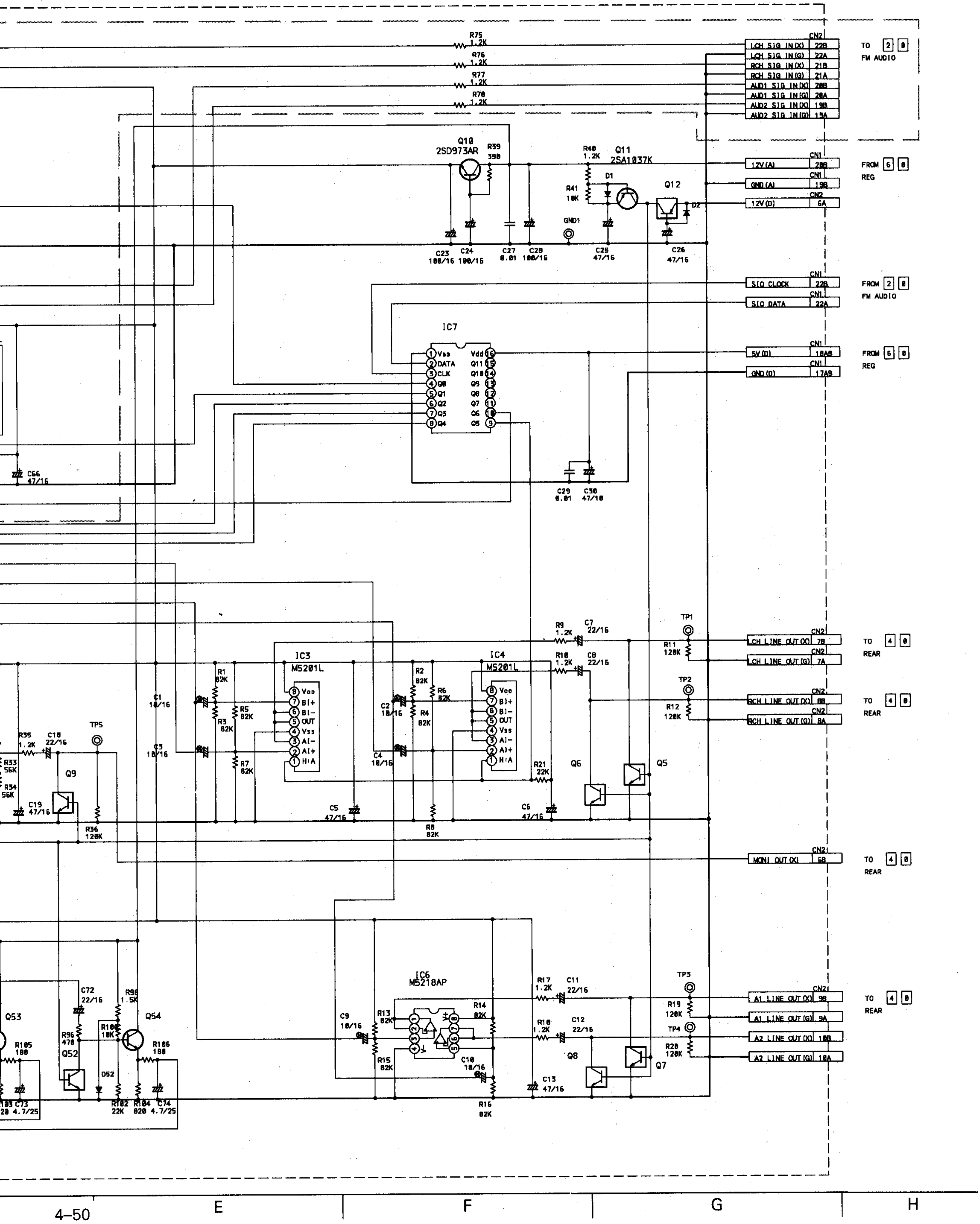
SYMBOL	No.	REC	PB
	29	0.0	0.0
	30	2.7	—

4.31 AV I/O SCHEMATIC DIAGRAM

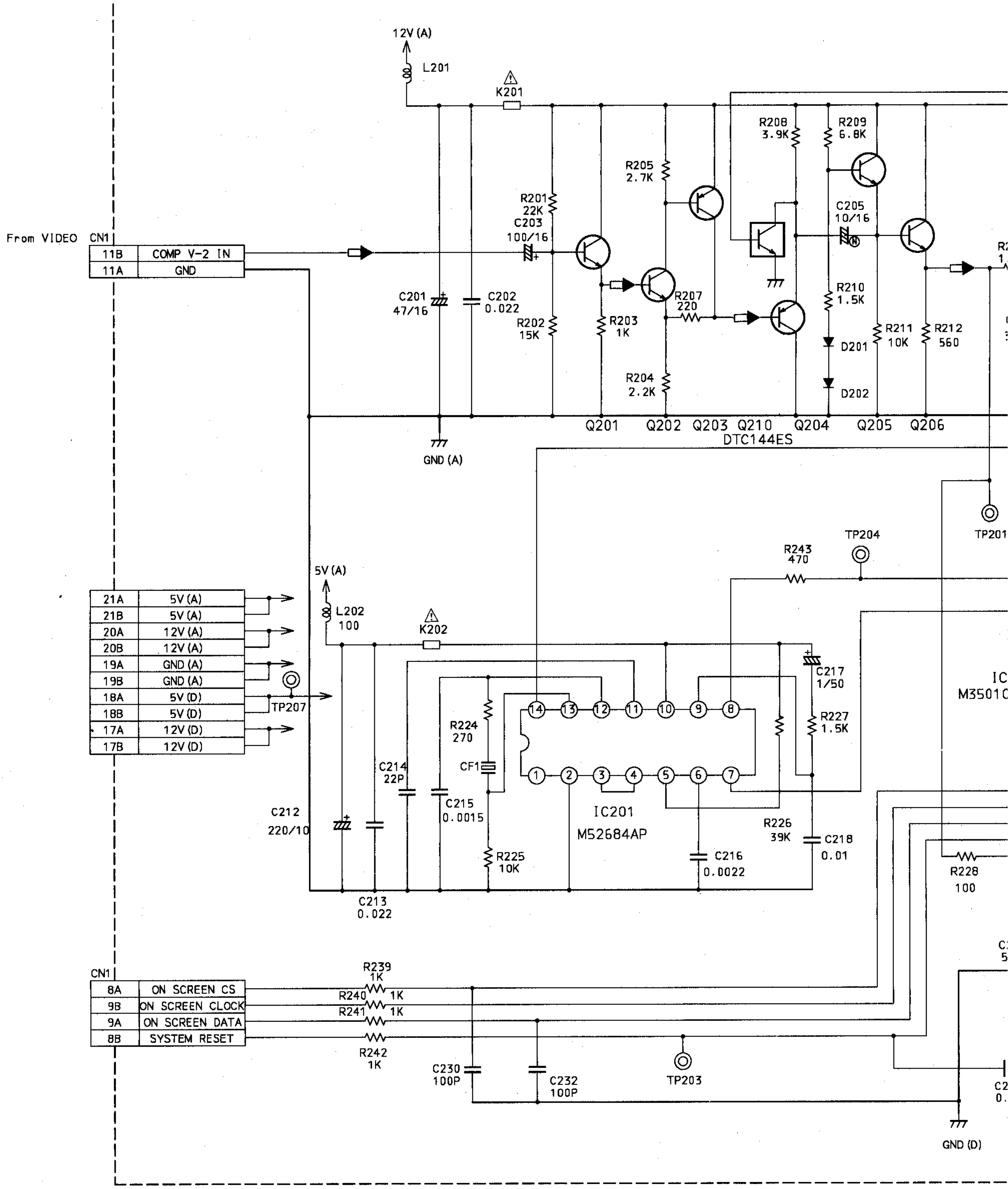
— DIAGRAM (1/2) —


BR-S800 ONLY
FROM 4 8 REAR
CN2
11B LCH LINE IN(X)
11A LCH LINE IN(G)
12B RCH LINE IN(X)
12A RCH LINE IN(G)
13B AUD1 LINE IN(X)
13A AUD1 LINE IN(G)
14B AUD2 LINE IN(X)
14A AUD2 LINE IN(G)
FROM 3 3 OP-VR
3B MIC OUT(X)
3A MIC OUT(G)
2A MIC SW
FROM 2 8 FM AUDIO
18B LCH SIG OUT(X)
18A LCH SIG OUT(G)
17B RCH SIG OUT(X)
17A RCH SIG OUT(G)
16B AUD1 SIG OUT(X)
16A AUD1 SIG OUT(G)
15B AUD2 SIG OUT(X)
15A AUD2 SIG OUT(G)
TO 3 3 OP-VR
5A P.MUTE
5B LCH HP OUT(X)
4A LCH HP OUT(G)
4B RCH HP OUT(X)
1A METER(G)
2B LCH METER(X)
1B RCH METER(X)
IC51 M5201L
IC52 M5201L
IC53 M5201L
IC54 M5201L
IC55 M5201L
Vdd BI+ BI- OUT Vss AI- AI+ H:A
C51 10/16
C52 10/16
C53 10/16
C54 10/16
C55 47/16
C56 47/16
C57 10/16
C58 10/16
C59 10/16
C60 10/16
C61 47/16
C62 47/16
C64 10/16
C65 47/16
C66 47/1
R51 8.2K
R52 8.2K
R53 8.2K
R54 22K
R55 33K
R56 33K
R57 33K
R58 33K
R59 33K
R60 33K
R61 33K
R62 33K
R63 8.2K
R64 22K
R65 33K
R66 33K
R67 33K
R68 33K
R69 8.2K
R70 8.2K
R71 33K
R72 33K
R73 33K
R74 33K
R82 33K
R83 33K
R84 33K
R85 3.3K
R86 22K
R109 8.2K
R110 8.2K
R151 82K
R152 82K
R153 82K
R154 82K
R155 82K
R156 82K
R157 82K
R158 82K
L
R
A1
A2
Q15 DTA124EK
C31 0.033
C32 0.033
Q13 DTC323TK
Q14 DTC323TK
IC1 TC4053BP
Vdd INH Vee Vss
IC6 M5218AP
R22 82K
R23 82K
C14 47/16
C15 10/16
C16 10/16
R25 39K
R26 39K
R24 22K
R29 56K
R30 56K
IC2 M5218AP
R31 43K
R32 39K
R33 56K
R34 56K
R35 1.2K
C19 47/1
IC5 TC4052BP
C20 22/16
C21 22/16
R37 82K
R38 82K
C67 10/16
IC56 M5218AP
R87 82K
R89 82K
R91 39K
R92 39K
R93 39K
R94 39K
R88 82K
R90 82K
C68 10/16
C22 47/16
C69 10/16
C70 10/16
C75 47/16
C71 22/16
R97 1.5K
R95 470
R99 10K
Q51
Q53
D51
R105 100
R101 22K
R103 820
C73 4.7/25
R107 1K
R108 1K
2 3 AV I/O
6
5
4
3
2
1
A
B
C

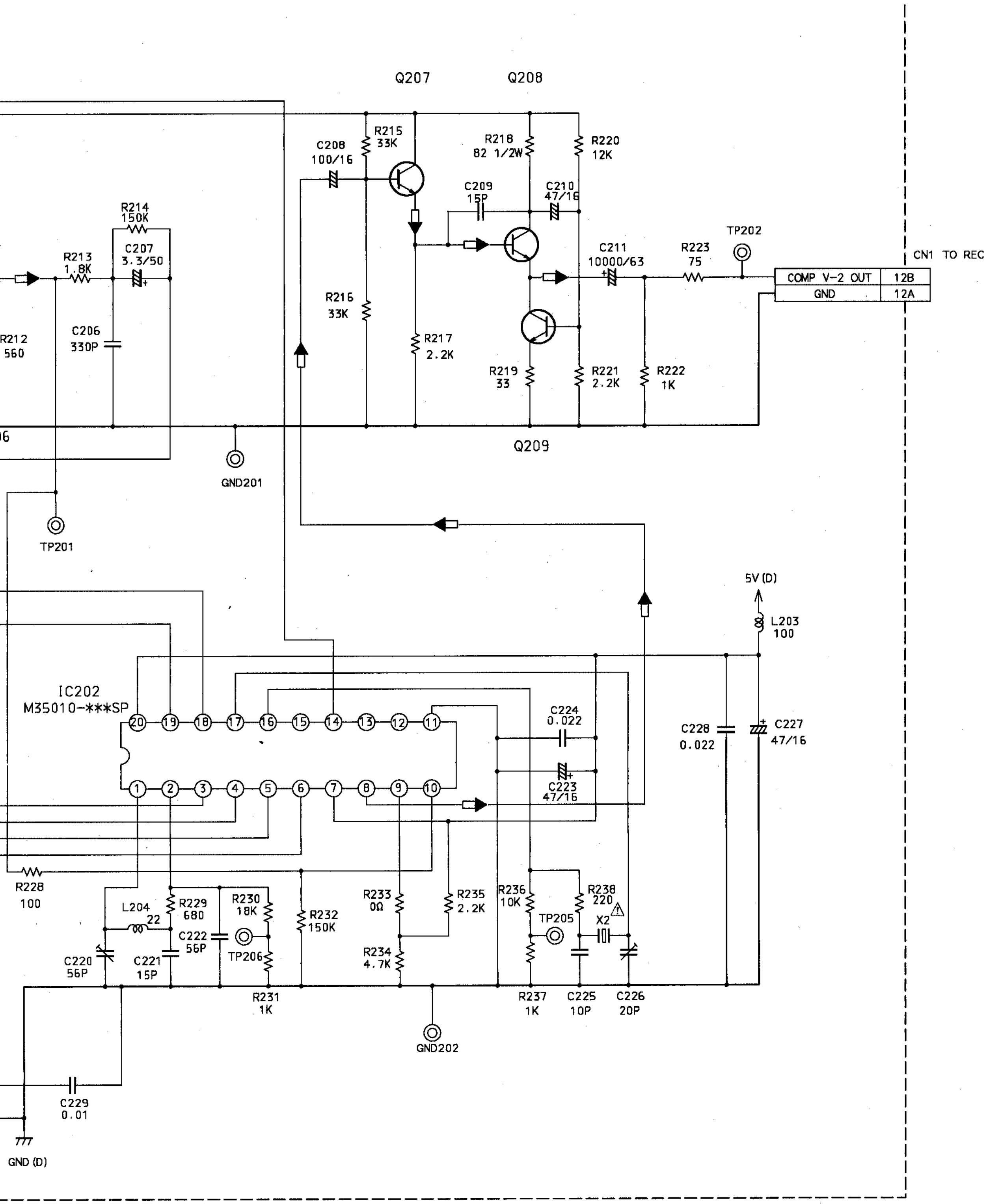
NOTE:UNLESS OTHERWISE SPECIFIED;
ALL NPN TRANSISTORS ARE 2SC2412K
ALL PNP TRANSISTORS ARE 2SA1037K
ALL NPN DIGITAL TRANSISTORS ARE DTC323TK
ALL PNP DIGITAL TRANSISTORS ARE DTA124EK
ALL DIODES ARE MA151WK
ALL RESISTANCE VALUES ARE IN OHMS.(#/#W)
ALL INDUCTANCE VALUES ARE IN µH.
ALL CAPACITANCE VALUES ARE IN uF.


R75 1.2K
R76 1.2K
R77 1.2K
R78 1.2K
CN2
LCH SIG IN(X) 22B
LCH SIG IN(G) 22A
RCH SIG IN(X) 21B
RCH SIG IN(G) 21A
AUD1 SIG IN(X) 20B
AUD1 SIG IN(G) 20A
AUD2 SIG IN(X) 19B
AUD2 SIG IN(G) 19A
TO 2 0
FM AUDIO
Q10 2SD973AR
R39 390
R40 1.2K
Q11 2SA1037K
R41 10K
D1
Q12
D2
GND1
C23 100/16
C24 100/16
C27 0.01
C28 100/16
C25 47/16
C26 47/16
CN1 12V(A) 20B
CN1 GND(A) 19B
CN2 12V(D) 6A
FROM 6 0
REG
CN1 SIO CLOCK 22B
CN1 SIO DATA 22A
FROM 2 0
FM AUDIO
IC7
1 Vss
2 DATA
3 CLK
4 Q0
5 Q1
6 Q2
7 Q3
8 Q4
Vdd 16
Q11 15
Q10 14
Q9 13
Q8 12
Q7 11
Q6 10
Q5 9
CN1 5V(D) 18AB
CN1 GND(D) 17AB
FROM 6 0
REG
C66 47/16
C29 0.01
C30 47/10
R9 1.2K
C7 22/16
R10 1.2K
C8 22/16
TP1
R11 120K
TP2
R12 120K
CN2 LCH LINE OUT(X) 7B
CN2 LCH LINE OUT(G) 7A
TO 4 0
REAR
CN2 RCH LINE OUT(X) 8B
CN2 RCH LINE OUT(G) 8A
TO 4 0
REAR
IC3 M5201L
IC4 M5201L
8 Voo
7 BI+
6 BI-
5 OUT
4 Vss
3 AI-
2 AI+
1 H/A
R1 82K
R3 82K
R5 82K
R7 82K
R2 82K
R4 82K
R6 82K
R8 82K
R21 22K
C1 10/16
C5 10/16
C2 10/16
C4 10/16
C5 47/16
C6 47/16
Q6
Q5
R35 1.2K
C18 22/16
TP5
R33 56K
R34 56K
Q9
C19 47/16
R36 120K
CN2 MONI OUT(X) 5B
TO 4 0
REAR
IC6 M5218AP
R17 1.2K
C11 22/16
R18 1.2K
C12 22/16
TP3
R19 120K
TP4
R20 120K
R13 82K
R14 82K
R15 82K
R16 82K
C9 10/16
C10 10/16
C13 47/16
Q8
Q7
CN2 A1 LINE OUT(X) 9B
A1 LINE OUT(G) 9A
A2 LINE OUT(X) 10B
A2 LINE OUT(G) 10A
TO 4 0
REAR
Q53
R105 100
C72 22/16
R98 1.5K
Q54
R96 470
R100 10K
R106 100
Q52
D52
R103 820
C73 4.7/25
R102 22K
R104 820
C74 4.7/25
E
F
G
H

— DIAGRAM (2/2) —


12V (A)
L201
K201
R208 3.9K
R209 6.8K
R205 2.7K
R201 22K
C203 100/16
C205 10/16
From VIDEO CN1
11B COMP V-2 IN
11A GND
C201 47/16
C202 0.022
R207 220
R210 1.5K
R202 15K
R203 1K
R211 10K
R212 560
D201
R204 2.2K
D202
Q201 Q202 Q203 Q210 Q204 Q205 Q206
DTC144ES
GND (A)
TP201
TP204
R243 470
5V (A)
L202 100
K202
21A 5V (A)
21B 5V (A)
20A 12V (A)
20B 12V (A)
19A GND (A)
19B GND (A)
18A 5V (D)
18B 5V (D)
17A 12V (D)
17B 12V (D)
TP207
C217 1/50
IC
M3501C
R224 270
R227 1.5K
C214 22P
CF1
C212 220/10
C215 0.0015
IC201
M52684AP
R226 39K
C218 0.01
R225 10K
C216 0.0022
R228 100
C213 0.022
CN1
8A ON SCREEN CS
9B ON SCREEN CLOCK
9A ON SCREEN DATA
8B SYSTEM RESET
R239 1K
R240 1K
R241 1K
R242 1K
C230 100P
C232 100P
TP203
GND (D)

NOTE: UNLESS OTHERWISE SPECIFIED;
ALL NPN TRANSISTORS ARE 2SC2778 (C)
ALL PNP TRANSISTORS ARE 2SD601A (Q)
ALL DIODES ARE DAN202K
ALL RESISTANCE VALUES ARE IN OHMS. (1/1
ALL INDUCTANCE VALUES ARE IN μH.

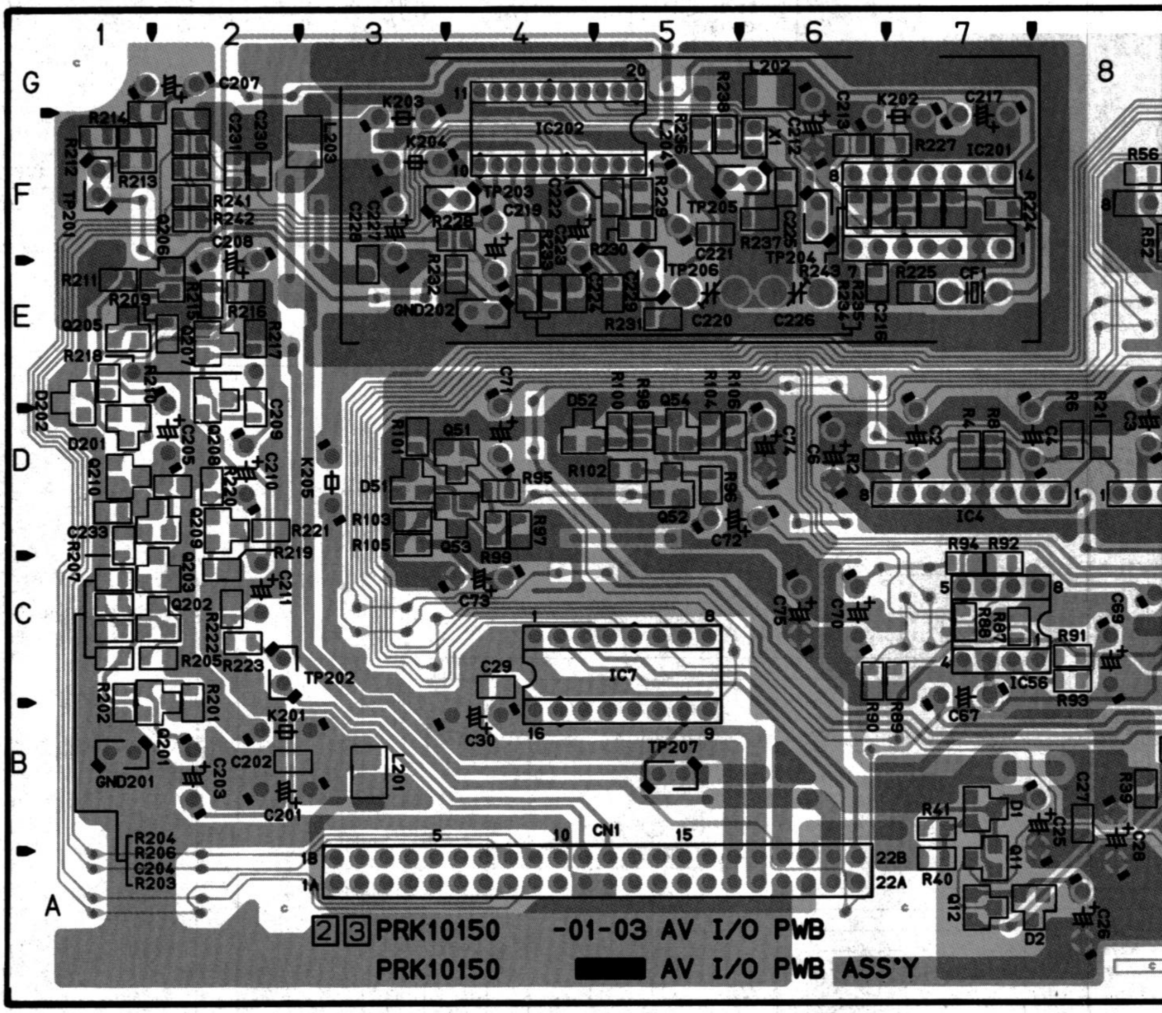

Q207
Q208
Q209
R215 33K
C208 100/16
R218 82 1/2W
R220 12K
C209 15P
C210 47/16
R214 150K
C207 3.3/50
R213 1.8K
C211 10000/63
R223 75
TP202
CN1 TO REC
COMP V-2 OUT
12B
GND
12A
R216 33K
R217 2.2K
R212 560
C206 330P
R219 33
R221 2.2K
R222 1K
6
GND201
TP201
5V (D)
L203 100
IC202
M35010-***SP
20 19 18 17 16 15 14 13 12 11
1 2 3 4 5 6 7 8 9 10
C224 0.022
C223 47/16
C228 0.022
C227 47/16
R228 100
L204 22
R229 680
R230 18K
R232 150K
R233 0Ω
R235 2.2K
R236 10K
R238 220
TP205
X2
C222 56P
TP206
C220 56P
C221 15P
R231 1K
R234 4.7K
R237 1K
C225 10P
C226 20P
GND202
C229 0.01
GND (D)

D;
B (C)
A (Q)

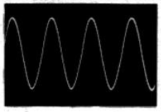
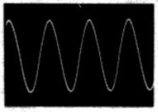
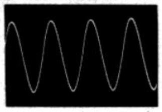
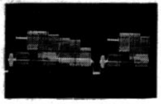
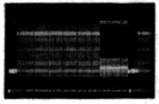
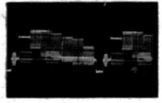
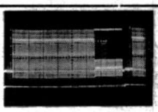
HMS. (1/10W)
H.

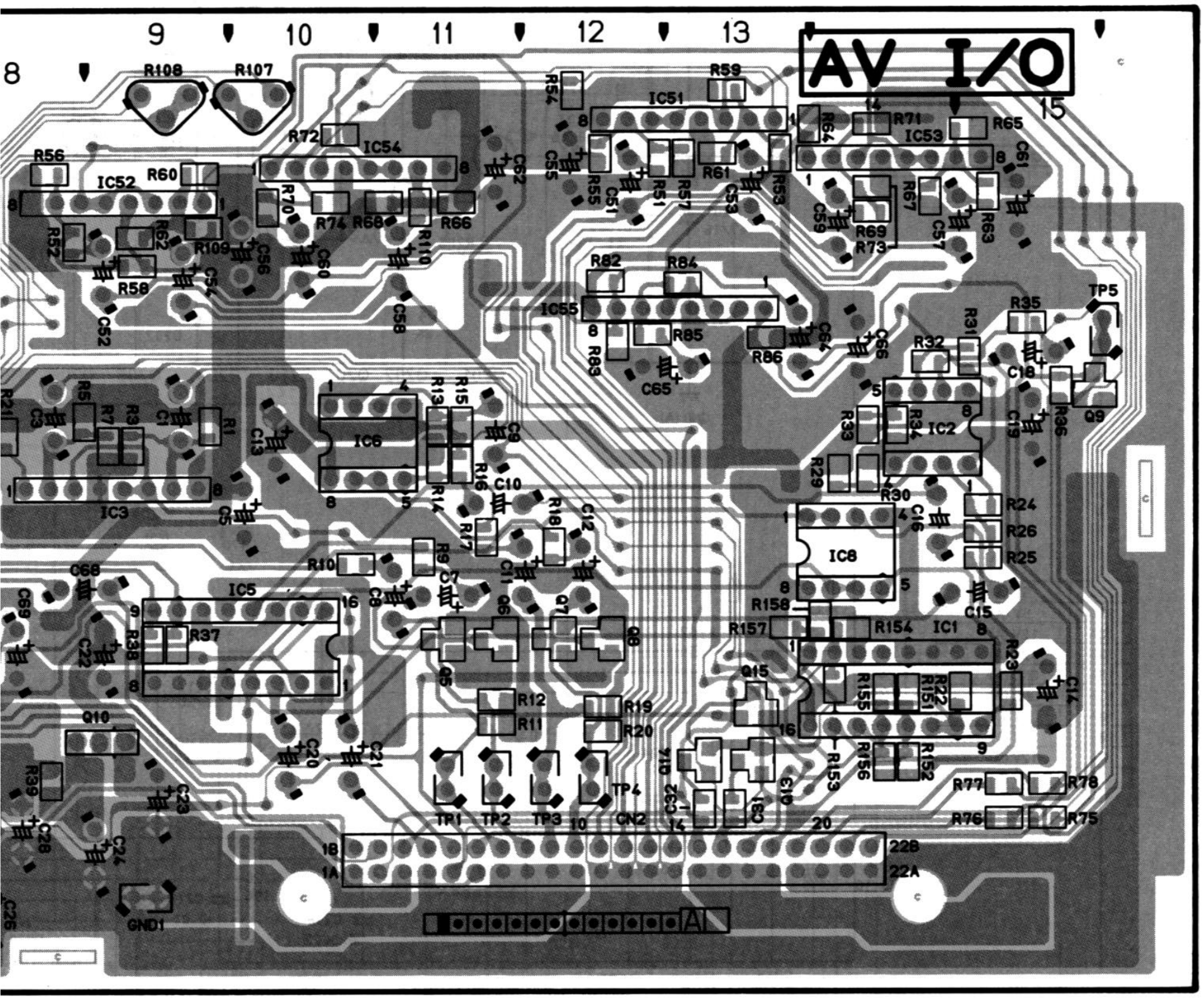
ALL CAPACITANCE VALUES ARE IN uF.
ELECTROLYTIC
CERAMIC

4.32 AV I/O CIRCUIT BOARD


1
2
3
4
5
6
7
8
G
F
E
D
C
B
A
IC202
IC201
IC4
IC7
IC56
CN1
L201
L202
L203
TP201
TP202
TP203
TP204
TP205
TP206
TP207
GND201
GND202
K201
K202
K203
K204
K205
X1
CF1
D51
D52
D201
D202
D1
D2
Q51
Q52
Q53
Q54
Q11
Q12
Q201
Q202
Q203
Q205
Q206
Q207
Q208
Q209
Q210
1A
1B
22A
22B
2 3 PRK10150 -01-03 AV I/O PWB
PRK10150 AV I/O PWB ASS'Y

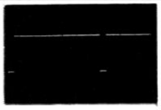
— MAIN WAVEFSORMS OF AV I/O CIRCUIT —

TP1 & TP2	TP3 & TP4	TP5	TP201	TP202	
			 	 	
[PB] 1.1 Vp-p	[PB] 0.9 Vp-p	[PB] 1.2 Vp-p	1.0 Vp-p — H-rate — — V-rate —	1.1 Vp-p — H-rate — — V-rate —	



9
10
11
12
13
15
8
AV I/O
R108
R107
R59
R54
IC51
R64
R71
R65
IC53
C61
R56
IC52
R60
R72
IC54
C62
C55
R55
C51
R51
R57
R61
C53
R53
R70
R74
R68
R66
R110
C60
C56
R109
C54
R62
R52
R58
C52
C58
C59
R67
R69
R73
C57
R63
R82
R84
IC55
R83
R85
C65
R86
C64
C66
R35
TP5
R31
R32
C18
Q9
R36
C19
R33
R34
IC2
R29
R30
R21
C3
R5
R7
R3
C1
R1
IC3
C13
IC6
R13
R15
C9
R16
R14
C10
R17
R18
C12
C5
C16
R24
R26
R25
IC8
C15
C68
R10
R9
C7
C8
C11
C69
IC5
R37
R38
C22
Q6
Q7
Q8
Q5
R158
R157
R154
IC1
R23
C14
Q15
R155
R151
R22
R12
R11
R19
R20
Q10
C20
C21
Q14
C32
C31
C10
R153
R156
R152
R77
R78
R76
R75
R39
C23
C28
C24
C26
GND1
TP1
TP2
TP3
TP4
CN2
1B
1A
22B
22A
20
14
A

TP204



4.3 Vp-p
(15.75 kHz)

— DC Voltage —

SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC1	1	5.6	5.6
	2	5.7	5.6
	3	0.0	0.0
	4	0.0	0.0
	5	0.0	0.0
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	11.2	11.2
	10	0.0	0.0
	11	0.0	0.0
	12	5.6	5.6
	13	5.5	5.6
	14	5.6	5.6
	15	5.6	5.5
	16	11.3	11.3
IC2	1	5.6	5.6
	2	5.6	5.6
	3	5.6	5.6
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.8	5.8
	8	11.3	11.3
IC3	1	11.1	11.3
	2	5.6	5.7
	3	5.7	5.7
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.6	5.7
	8	11.3	11.3
IC4	1	11.3	11.3
	2	5.6	5.7
	3	5.7	5.7
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.7	5.7
	8	11.3	11.3
IC5	1	0.0	0.0
	2	5.6	5.6
	3	5.6	5.6
	4	5.6	5.6
	5	5.7	5.6
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	11.2	11.2
	10	10.8	11.2
	11	5.7	5.6
	12	0.0	0.0
	13	5.7	5.6
	14	5.7	5.6
	15	5.6	5.6
	16	11.3	11.3
IC6	1	5.6	5.6
	2	5.6	5.6
	3	5.6	5.6
	4	0.0	0.0
	5	5.6	5.6
	6	5.6	5.7
	7	5.6	5.7
	8	11.3	11.3
IC7	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	0.1	0.0
	5	0.1	0.0
	6	0.0	0.0
	7	10.4	11.2
	8	10.6	11.2
	9	11.0	11.3
	10	10.8	11.3
	11	0.0	0.0
	12	0.0	0.0
	13	0.0	0.0
	14	0.0	0.0
	15	0.0	0.0
	16	5.2	5.2
IC8	1	5.7	5.6
	2	5.7	5.5
	3	5.7	5.5
	4	0.0	0.0
	5	5.6	5.6
	6	5.6	5.6
	7	5.6	5.6
	8	11.3	11.3
IC51	1	0.1	0.1
	2	5.6	5.6
	3	5.7	5.7
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.7	5.7
	8	11.3	11.3
IC52	1	0.1	0.1
	2	5.7	5.7
	3	5.7	5.7
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.6	5.7
	8	11.3	11.3
IC53	1	0.1	0.1
	2	5.6	5.6
	3	5.7	5.7
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.7	5.7
	8	11.3	11.3
IC54	1	0.1	0.1
	2	5.7	5.7
	3	5.7	5.7
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.7	5.7
	8	11.3	11.3
IC55	1	11.3	11.3
	2	5.7	5.7
	3	5.7	5.7
	4	0.0	0.0
	5	5.7	5.7
	6	5.7	5.7
	7	5.7	5.7
	8	11.3	11.3
IC56	1	5.7	5.7
	2	5.7	5.7
	3	5.7	5.7
	4	0.0	0.0
	5	5.6	5.7
	6	5.7	5.7
	7	5.7	5.7
	8	11.3	11.3
IC201	1	0.9	0.9
	2	0.0	0.0
	3	1.0	1.0
	4	1.0	1.0
	5	3.4	3.4
	6	0.2	0.2
	7	4.4	4.4
	8	4.1	4.1
	9	2.7	2.7
	10	5.2	5.2
	11	2.1	2.1
	12	2.2	2.2
	13	3.0	3.0
	14	3.7	3.7
IC202	1	2.3	2.3
	2	2.3	2.3
	3	3.5	3.7
	4	4.8	4.8
	5	0.7	0.8
	6	5.2	5.2
	7	5.1	5.1
	8	2.6	2.6
	9	3.4	3.4
	10	2.6	2.6
	11	0.0	0.0
	12	0.0	0.0
	13	0.0	0.0
	14	0.0	0.0
	15	0.0	0.0
	16	2.3	2.3
	17	2.2	2.2
	18	4.2	4.2
	19	4.4	4.4
	20	5.1	5.1
TRANSISTOR			
Q1	B	0.6	0.0
	C	3.2	0.0
	E	0.0	0.0
Q2	B	0.5	0.5
	C	3.2	2.6
	E	0.0	0.0
Q3	B	11.1	11.3
	C	0.5	0.0
	E	11.3	11.3
Q5	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q6	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q7	B	0.0	0.0
	C	0.0	0.1
	E	0.0	0.0
Q8	B	0.0	0.0
	C	0.0	0.2
	E	0.0	0.0
Q9	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q10	B	12.0	12.0
	C	12.1	12.1
	E	11.3	11.3
Q11	B	12.1	12.1
	C	0.0	0.4
	E	0.0	12.0
Q12	B	12.9	12.8
	C	0.0	0.4
	E	12.9	12.9
Q51	B	0.5	0.0
	C	0.5	0.5
	E	0.0	0.0
Q52	B	0.5	0.0
	C	0.5	0.5
	E	0.0	0.0
Q53	B	0.5	0.5
	C	12.1	12.1
	E	0.0	0.0
Q54	B	0.5	0.5
	C	12.1	12.1
	E	0.0	0.0
Q201	B	3.5	3.5
	C	11.7	11.7
	E	2.8	2.8
Q202	B	2.8	2.8
	C	11.0	11.0
	E	2.3	2.4
Q203	B	11.0	11.0
	C	2.4	2.5
	E	11.7	11.7
Q204	B	2.5	2.5
	C	0.0	0.0
	E	2.9	2.8
Q205	B	3.1	3.1
	C	11.7	11.7
	E	3.2	3.1
Q206	B	3.1	3.1
	C	11.7	11.7
	E	2.6	2.6
Q207	B	5.8	5.8
	C	11.7	11.7
	E	5.4	5.4
Q208	B	5.4	5.4
	C	9.3	9.3
	E	4.6	4.6
Q209	B	1.6	1.6
	C	4.6	4.6
	E	1.0	1.0
Q210	B	0.0	0.0
	C	2.9	2.8
	E	0.0	0.0
CONNECTOR			
CN1	1 AB	0.4	0.0
	2A	0.0	0.0
	2B	6.9	6.9
	3A	0.0	0.0
	3B	6.9	6.9
	4A	0.0	0.0
	4B	6.9	6.9
	5A	0.0	0.0
	5B	6.9	6.9
	6A	—	0.0
	6B	0.0	0.0
	7 AB	0.0	0.0
	8A	3.6	3.7
	8B	5.2	5.2
	9A	0.5	0.7
	9B	4.8	4.8
	10AB	—	0.0
	11AB	0.0	0.0
	12AB	0.0	0.0
	13AB	—	0.0
	14AB	0.0	0.0
	15AB	0.0	0.0
	16A	—	0.0
	16B	0.0	0.0
	17AB	0.0	0.0
	18AB	5.2	5.2
	19AB	0.0	0.0
	20AB	12.1	12.1
	21AB	5.3	5.3
	22AB	0.0	0.0
CN2	1 AB	0.0	0.0
	2A	11.3	11.2
	2B	0.0	0.0
	3A	0.0	0.0
	3B	1.8	1.8
	4 AB	0.0	0.0
	5A	0.0	0.5
	5B	0.0	0.0
	6A	12.9	12.9
	6B	0.0	0.2
	7 AB	0.0	0.0
	8 AB	0.0	0.0
	9 AB	0.0	0.0
	10AB	0.0	0.0
	11A	0.0	0.0
	11B	2.6	0.3
	12A	0.0	0.0
	12B	3.1	1.4
	13A	0.0	0.0
	13B	2.8	2.7
	14A	0.0	0.0
	14B	3.1	3.6
	15A	0.0	0.0
	15B	5.7	5.6
	16A	0.0	0.0
	16B	5.6	5.6
	17A	0.0	0.0
	17B	5.7	5.6
	18A	0.0	0.0
	18B	5.6	5.6
	19A	0.0	0.0
	19B	5.7	5.7
	20A	0.0	0.0
	20B	5.7	5.7
	21A	0.0	0.0
	21B	5.2	5.3
	22A	0.0	0.0
	22B	5.3	5.3

6

4.33 M-CTL/SERVO CIRCUIT BOARD

5

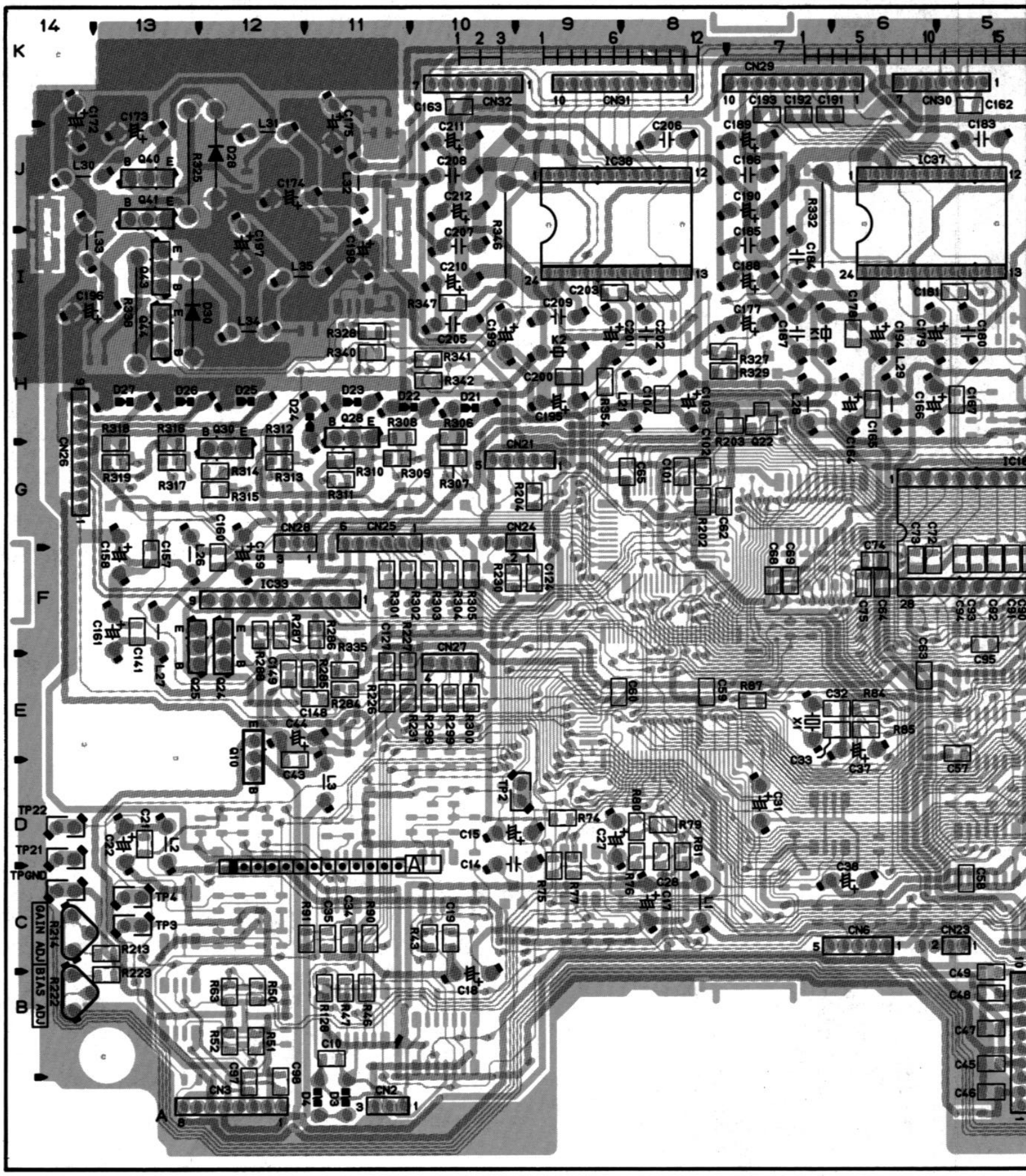
— SOLDER Side —

4

3

2

1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K
J
I
H
G
F
E
D
C
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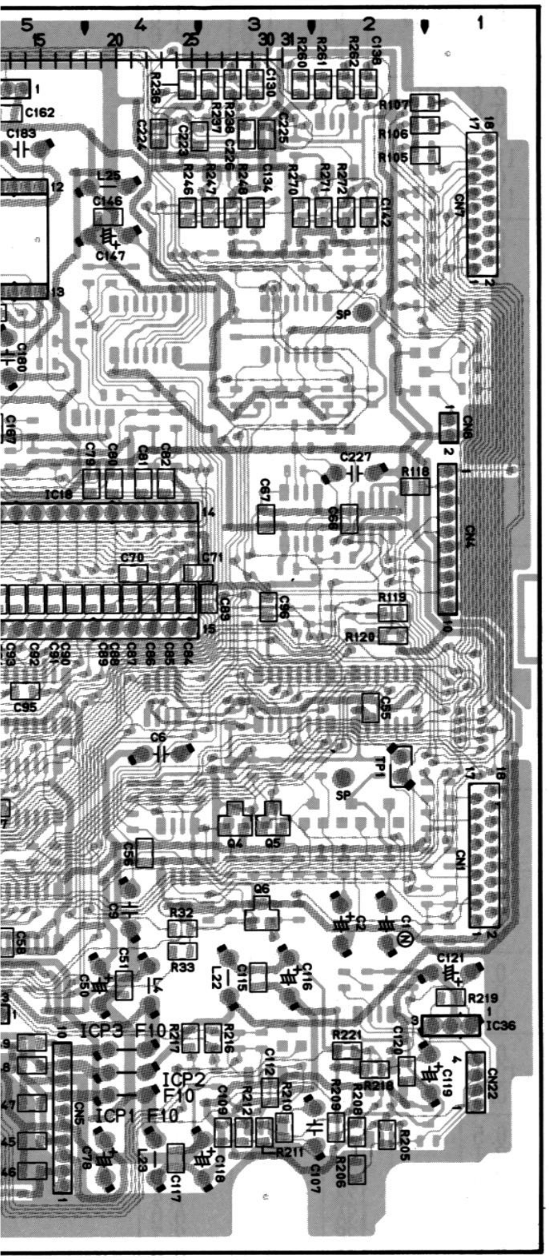
A
CN32
CN31
CN29
CN30
C163
C162
C193
C192
C191
C206
C183
C189
C211
C208
IC38
IC37
C212
C207
C210
R346
R332
C186
C190
C185
C188
C164
C177
C187
C203
C209
C205
C199
C201
C202
R347
R328
R340
R341
R342
K1
K2
C176
C181
C179
C180
C194
L29
R327
R329
C200
C195
R354
L31
C104
C103
C102
L28
R203
Q22
C172
C173
C175
C174
C197
C198
C196
Q40
Q41
Q43
Q44
R325
R308
D28
D29
D30
L30
L31
L32
L33
L34
L35
D27
D26
D25
D24
D23
D22
D21
CN26
R318
R316
Q30
R312
Q28
R308
R306
R319
R317
R314
R315
R313
R310
R311
R309
R307
CN21
R204
C55
C101
C165
C166
C167
C182
C184
IC16
C62
R202
CN28
CN25
CN24
C158
C157
L26
C160
C159
IC33
R301
R302
R303
R304
R305
R230
C124
C68
C69
C74
C73
C72
C75
C56
C94
C93
C92
C91
C90
C161
C141
L27
Q25
Q24
R287
R286
R335
R288
C149
R285
R284
C148
C127
R227
CN27
R226
R231
R298
R299
R300
C63
C95
C66
C59
R87
C32
R84
X1
R85
C33
C37
C57
C44
C43
Q10
L3
TP2
R74
R80
R79
R81
C15
C14
C27
R75
R77
R76
C28
C17
L1
C31
C38
C58
TP22
TP21
TPGND
C21
C22
L2
TP4
TP3
R214
R213
R223
R222
GAIN ADJ
BIAS ADJ
A1
R91
C35
C34
R90
C19
R43
C18
R63
R56
R126
R47
R46
R52
R51
C10
C97
C98
CN3
D4
D3
CN2
CN6
CN23
C49
C48
C47
C45
C46

A

B

C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4
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15
20
25
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31
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R262
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R236
C130
R237
R238
C226
C225
C224
C223
R246
R247
R248
C134
R270
R271
R272
C142
R107
R106
R105
CN7
18
17
2
1
C162
C163
L25
C146
C147
12
13
SP
C180
C167
CN6
C227
R118
CN4
C79
C80
C81
C82
IC18
14
C67
C66
C70
C71
C65
C68
15
R119
R120
10
C93
C92
C91
C90
C89
C88
C87
C86
C85
C84
C95
C55
C6
TP1
SP
CN1
Q4
Q5
C56
Q6
C5
R32
R33
C2
C1
C58
C51
L4
C50
L22
C115
C116
C121
R219
IC36
ICP3
F10
R217
R216
R221
C120
ICP2
F10
C112
R210
R218
C119
CN22
ICP1
F10
C109
R212
R209
R208
R205
CN5
C78
L23
C117
C118
R211
C107
R206

— DC Voltage (1/3) —

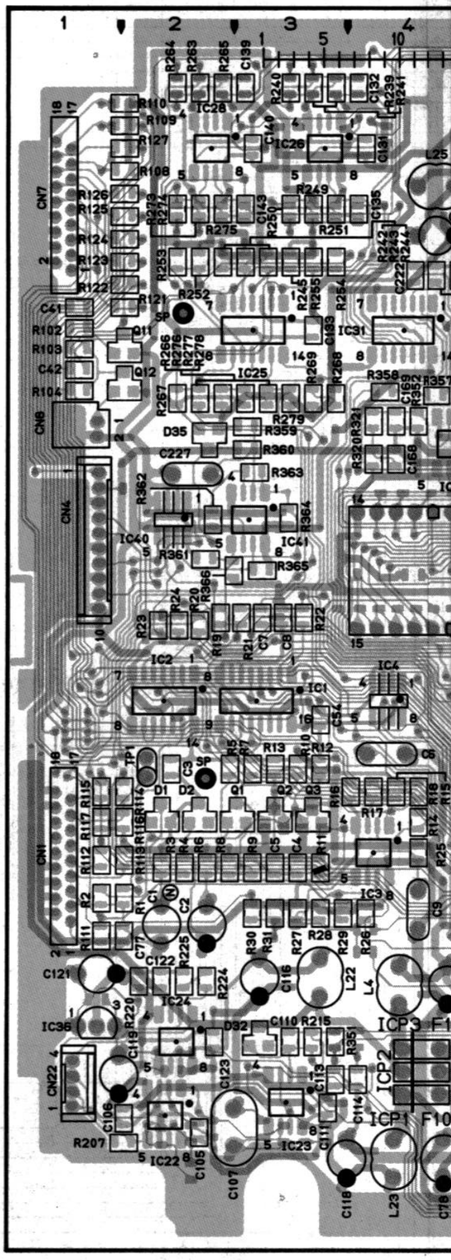
SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC1	1	0.1	0.1
	2	4.0	4.0
	3	0.1	0.1
	4	0.1	0.1
	5	0.4	0.4
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	4.5	4.5
	10	0.0	0.0
	11	4.5	4.5
	12	0.4	0.4
	13	0.1	0.1
	14	0.1	0.1
	15	4.0	4.0
	16	4.9	4.9
IC2	1	4.0	4.0
	2	0.4	0.4
	3	4.8	4.8
	4	0.1	0.1
	5	4.5	4.9
	6	0.0	0.0
	7	0.0	0.0
	8	0.4	0.4
	9	4.5	4.7
	10	4.5	4.7
	11	0.5	0.5
	12	0.1	0.1
	13	4.8	4.8
	14	4.9	4.9
IC3	1	4.8	4.8
	2	0.4	0.4
	3	3.2	3.2
	4	0.0	0.0
	5	3.2	3.2
	6	0.4	0.4
	7	4.8	4.8
	8	4.9	4.9
IC4	1	0.1	0.1
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	4.1	4.1
	6	0.0	0.0
	7	0.1	0.1
	8	4.9	4.9
IC5	1	—	0.0
	2	—	0.0
	3	—	0.2
	4	2.5	2.5
	5	2.7	2.7
	6	2.6	2.6
	7	0.0	0.0
	8	2.6	2.6
	9	2.5	2.5
	10	0.1	0.1
	11	0.0	0.0
	12	5.2	5.2
	13	4.9	4.9
	14	4.9	4.9
IC6	1	—	2.6
	2	2.6	2.6
	3	2.6	2.6
	4	2.6	2.6
	5	5.1	0.1
	6	0.0	4.9
	7	0.0	0.0
	8	0.0	0.0
	9	5.1	0.1
	10	2.6	2.6
	11	2.5	2.5
	12	0.0	4.9
	13	0.0	4.9
	14	5.1	5.1
IC7	1	2.5	2.5
	2	2.4	0.1
	3	2.4	2.6
	4	2.6	2.6
	5	0.0	0.0
	6	0.0	0.0
	7	0.0	0.0
	8	2.6	2.6
	9	2.4	2.6
	10	2.8	0.1
	11	2.6	2.6
	12	4.9	0.0
	13	4.9	0.0
	14	5.1	5.1
IC8	1	2.9	2.9
	2	2.6	2.6
	3	2.6	2.6
	4	0.0	0.0
	5	2.6	2.6
	6	2.6	2.6
	7	2.6	2.6
	8	5.1	5.1
IC9	1	2.5	2.5
	2	2.6	2.6
	3	2.6	2.6
	4	0.0	0.0
	5	2.4	2.4
	6	2.6	2.6
	7	0.1	0.1
	8	5.1	5.1
IC10	1	2.5	2.5
	2	2.5	2.5
	3	2.5	2.5
	4	0.0	0.0
	5	2.5	2.5
	6	2.5	2.5
	7	2.5	2.5
	8	5.0	5.0
IC11	1	2.6	2.6
	2	2.5	2.5
	3	2.5	2.5
	4	0.0	0.0
	5	2.5	2.5
	6	2.5	2.5
	7	2.7	2.7
	8	5.0	5.0
IC12	1	2.6	2.6
	2	2.6	2.6
	3	2.5	2.5
	4	0.0	0.0
	5	1.1	1.1
	6	1.1	1.1
	7	3.1	3.1
	8	19.0	19.0
IC13	1	4.9	4.9
	2	0.0	0.0
	3	0.1	0.1
	4	0.0	0.0
	5	2.5	2.5
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	0.0	0.0
	10	0.0	0.0
	11	0.0	0.0
	12	0.0	0.0
	13	4.9	4.9
	14	4.9	4.9
IC14	1	—	—
	2	—	—
	3	—	—
	4	—	—
	5	—	—
	6	—	—
	7	—	—
	8	—	—
	9	—	—
	10	—	—
	11	—	—
	12	—	—
	13	—	—
	14	—	—
	15	—	—
	16	—	—
	17	—	—
	18	—	—
	19	—	—
	20	—	—
	21	—	—
	22	—	—
	23	—	—
	24	—	—
	25	—	—
	26	—	—
	27	—	—
	28	—	—
	29	—	—
	30	—	—
	31	—	—
	32	—	—
	33	—	—
	34	—	—
	35	—	—
	36	—	—
	37	—	—
	38	—	—
	39	—	—
	40	—	—
	41	—	—
	42	—	—
	43	—	—
	44	—	—
	45	—	—
	46	—	—
	47	—	—
	48	—	—
	49	—	—
	50	—	—
	51	—	—
	52	—	—
	53	—	—
	54	—	—
	55	—	—
	56	—	—
	57	—	—
	58	—	—
	59	—	—
	60	—	—
	61	—	—
	62	—	—
	63	—	—
	64	—	—
	65	—	—
	66	—	—
	67	—	—
	68	—	—
	69	—	—
	70	—	—
	71	—	—
	72	—	—
	73	—	—
	74	—	—
	75	—	—
	76	—	—
	77	—	—
	78	—	—
	79	—	—
	80	—	—
	81	—	—
	82	—	—
	83	—	—
	84	—	—
	85	—	—
	86	—	—
	87	—	—
	88	—	—
	89	—	—
	90	—	—
	91	—	—
	92	—	—
	93	—	—
	94	—	—
	95	—	—
	96	—	—
	97	—	—
	98	—	—
	99	—	—
	100	—	—
IC15	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	4.9	4.9
	6	4.9	4.9
	7	0.0	0.0
	8	4.9	4.9
IC16	1	0.0	0.0
	2	0.0	—
	3	0.1	—
	4	0.1	—
	5	0.1	—
	6	0.1	—
	7	0.1	—
	8	0.1	—
	9	0.1	—
	10	0.0	0.0
	11	0.0	0.5
	12	0.0	2.6
	13	0.0	2.5
	14	0.0	2.7
	15	0.0	2.6
	16	0.0	2.5
	17	0.0	2.5
	18	0.0	2.5
	19	0.0	2.4
	20	4.9	4.9
IC17	1	0.0	0.0
	2	0.0	3.8
	3	0.0	1.3
	4	0.0	2.7
	5	0.0	2.0
	6	0.0	1.8
	7	4.9	4.9
	8	0.0	0.0
	9	4.9	4.9
	10	4.9	4.9
	11	4.9	4.9
	12	4.9	4.4
	13	4.9	4.9
	14	4.9	4.9
	15	4.9	4.9
	16	4.9	4.9
IC18	1	0.0	1.8
	2	0.0	2.4
	3	0.0	2.6
	4	0.0	2.5
	5	0.0	2.7
	6	0.0	2.6
	7	0.0	2.4
	8	0.0	2.5
	9	0.0	2.5
	10	0.0	2.4
	11	0.1	1.8
	12	0.1	—
	13	0.1	0.7
	14	0.0	0.0
	15	0.0	2.3
	16	0.1	—
	17	0.1	2.6
	18	0.1	—
	19	0.1	1.7
	20	0.0	0.0
	21	0.0	2.7
	22	4.9	3.4
	23	0.0	3.1
	24	0.0	2.4
	25	4.8	2.2
	26	0.0	4.0
	27	0.0	1.4
	28	4.9	4.9
IC21	1	0.0	0.0
	2	4.9	4.9
	3	0.0	0.0
	4	0.0	2.5
	5	0.0	2.5
	6	4.9	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	4.9	4.9
	10	0.0	0.0
	11	4.8	4.8
	12	0.0	4.9
	13	0.0	4.9
	14	0.0	0.0
	15	4.9	4.9
	16	0.0	0.0
	17	0.0	0.0
	18	0.0	0.0
	19	0.0	0.0
	20	0.0	0.0
	21	4.9	4.9
	22	0.0	0.0
	23	4.9	4.9

— DC Voltage (2/3) —

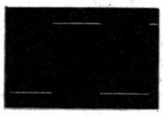
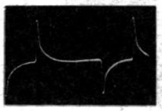
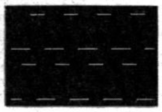
SYMBOL	No.	REC	PB
IC21	24	0.1	—
	25	0.1	—
	26	0.1	—
	27	0.1	—
	28	0.1	—
	29	0.1	—
	30	0.1	—
	31	0.1	—
	32	0.0	0.0
	33	0.0	0.0
	34	0.0	0.0
	35	4.9	4.9
	36	4.7	4.7
	37	4.8	4.8
	38	0.0	0.0
	39	4.8	4.8
	40	0.0	4.9
	41	4.8	4.8
	42	0.0	0.0
	43	4.8	4.8
	44	4.9	3.4
IC22	1	3.6	3.6
	2	4.2	4.2
	3	4.2	4.2
	4	12.3	-12.2
	5	4.0	4.0
	6	4.0	—
	7	4.3	4.3
	8	12.7	12.7
IC23	1	2.0	2.0
	2	0.3	0.3
	3	0.3	0.3
	4	12.3	-12.2
	5	2.0	2.0
	6	2.0	2.0
	7	0.3	0.3
	8	12.7	12.7
IC24	1	5.8	5.8
	2	2.5	2.5
	3	2.5	2.5
	4	0.0	0.0
	5	2.5	2.5
	6	2.5	2.5
	7	2.5	2.5
	8	12.7	12.7
IC25	1	—	—
	2	—	—
	3	5.0	5.0
	4	2.6	2.6
	5	2.5	2.5
	6	2.4	2.4
	7	2.5	2.5
	8	2.5	2.5
	9	2.5	2.5
	10	2.5	2.5
	11	2.5	2.5
	12	0.0	0.0
	13	2.5	2.5
	14	—	—
IC26	1	2.6	2.6
	2	2.5	2.5
	3	2.5	2.5
	4	0.0	0.0
	5	2.5	2.5
	6	2.5	2.5
	7	2.5	2.5
	8	5.0	5.0
IC28	1	2.5	2.5
	2	2.5	2.5
	3	2.5	2.5
	4	0.0	0.0
	5	2.5	2.5
	6	2.5	2.5
	7	2.5	2.5
	8	5.0	5.0
IC31	1	0.0	0.0
	2	0.0	0.0
	3	4.9	4.9
	4	0.0	0.0
	5	2.6	2.6
	6	2.3	2.3
	7	0.0	0.0
	8	0.0	0.0
	9	2.5	2.5
	10	2.5	2.5
	11	2.5	2.5
	12	2.5	2.5
	13	5.0	5.0
	14	4.9	4.9
IC32	1	0.1	0.1
	2	0.0	0.0
	3	0.0	0.0
	4	-12.3	-12.3
	5	2.6	2.6
	6	3.0	3.0
	7	-6.5	-6.5
	8	13.5	13.5
IC33	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.1
	5	0.0	0.0
	6	0.0	0.1
	7	0.0	0.1
	8	0.0	0.3
	9	13.5	13.5
IC34	1	0.1	0.1
	2	0.1	0.1
	3	0.1	0.1
	4	-12.3	-12.3
	5	0.2	0.2
	6	0.2	0.2
	7	0.2	0.2
	8	5.0	5.0
IC35	1	0.3	0.3
	2	2.7	2.7
	3	1.8	1.8
	4	0.0	0.0
	5	1.9	1.9
	6	2.7	2.7
	7	0.3	0.3
	8	5.0	5.0
IC36	1	2.5	2.5
	2	0.0	0.0
	3	10.9	10.9
IC37	1	—	—
	2	0.1	0.1
	3	—	—
	4	0.6	0.6
	5	2.3	2.3
	6	2.3	2.3
	7	2.3	2.3
	8	2.3	2.3
	9	2.3	2.3
	10	2.3	2.3
	11	—	—
	12	1.7	1.7
	13	5.0	5.0
	14	3.0	3.0
	15	0.0	0.0
	16	0.1	0.1
	17	1.2	1.2
	18	1.2	1.2
	19	0.0	0.0
	20	0.0	0.0
	21	0.6	0.6
	22	0.1	0.1
	23	—	—
	24	4.1	4.1
IC38	1	—	—
	2	0.2	0.2
	3	—	—
	4	1.8	1.8
	5	2.3	2.3
	6	2.4	2.4
	7	2.4	2.4
	8	2.4	2.4
	9	2.4	2.4
	10	2.4	2.4
	11	—	—
	12	1.7	1.7
	13	5.0	5.0
	14	3.0	3.0
	15	4.9	4.9
	16	0.2	0.2
	17	1.2	1.2
	18	1.2	1.2
	19	0.0	0.0
	20	0.0	0.0
	21	0.6	0.6
	22	0.2	0.2
	23	—	—
	24	4.4	5.4
IC39	1	0.0	0.0
	2	-6.5	-6.5
	3	0.0	0.0
	4	12.4	12.4
	5	13.5	13.5
TRANSISTOR			
Q1	B	2.4	2.4
	C	4.2	4.2
	E	1.8	1.8
Q2	B	4.2	4.2
	C	3.0	3.0
	E	4.8	4.8
Q3	B	3.3	3.3
	C	4.9	4.9
	E	2.8	2.8
Q4	B	.	.
	C	.	.
	E	.	.
Q5	B	.	.
	C	.	.
	E	.	.
Q6	B	.	.
	C	.	.
	E	.	.
Q7	B	4.8	4.8
	C	0.0	0.0
	E	0.0	0.0
Q8	B	3.8	3.8
	C	0.0	0.0
	E	2.2	2.0
Q9	B	3.2	2.7
	C	19.1	18.9
	E	2.6	2.2
Q10	B	2.5	2.1
	C	13.5	13.5
	E	2.0	1.6
Q11	B	0.0	0.0
	C	3.2	3.2
	E	0.0	0.0
Q12	B	4.9	4.9
	C	0.0	0.0
	E	4.9	4.9
Q22	B	.	.
	C	.	.
	E	.	.
Q23	B	0.0	0.0
	C	4.9	4.9
	E	0.0	0.0
Q24	B	0.1	0.1
	C	13.0	13.0
	E	0.2	0.2
Q25	B	13.0	13.0
	C	0.2	0.2
	E	13.5	13.5
Q26	B	12.8	12.8
	C	13.4	13.4
	E	13.5	13.5
Q27	B	18.9	18.9
	C	12.6	12.6
	E	18.9	18.9
Q30	B	18.8	18.8
	C	1.6	1.6
	E	18.9	18.9
Q31	B	18.2	18.2
	C	18.9	18.9
	E	18.9	18.9
Q32	B	18.9	18.9
	C	0.0	0.0
	E	18.9	18.9
Q33	B	4.9	4.9
	C	0.0	0.0
	E	0.0	0.0
Q34	B	0.0	0.0
	C	18.8	18.8
	E	0.0	0.0
Q37	B	0.0	0.0
	C	18.8	18.8
	E	0.0	0.0
Q38	B	4.9	4.9
	C	0.0	0.0
	E	0.0	0.0
Q39	B	0.0	0.0
	C	18.8	18.8
	E	0.0	0.0
Q40	B	18.8	18.8
	C	4.1	4.1
	E	18.8	18.8
Q41	B	0.3	0.3
	C	18.6	18.6
	E	0.0	0.0
Q42	B	4.1	4.1
	C	1.3	1.3
	E	5.0	5.0
Q43	B	18.8	18.8
	C	5.6	5.6
	E	18.9	18.9
Q44	B	0.4	0.4
	C	17.5	16.8
	E	0.0	0.0
Q45	B	5.8	5.2
	C	1.9	1.9
	E	5.0	5.0
CONNECTOR			
CN1	1	2.4	2.4
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	3.1	0.0
	6	0.0	0.0
	7	2.4	2.4
	8	0.0	0.0
	9	0.0	0.0
	10	0.0	0.0
	11	0.0	0.0
	12	0.0	0.0
	13	0.0	0.0
	14	0.0	0.0
	15	0.0	0.0
	16	0.0	0.0
	17	0.0	0.0
	18	0.0	0.0
CN2	1	—	2.6
	2	—	2.6
	3	0.0	0.0
CN3	1	2.5	2.5
	2	0.0	0.0
	3	2.5	2.5
	4	5.0	5.0
	5	13.5	13.5
	6	1.9	1.9
	7	4.9	4.9
	8	0.0	0.0

— DC Voltage (3/3) —

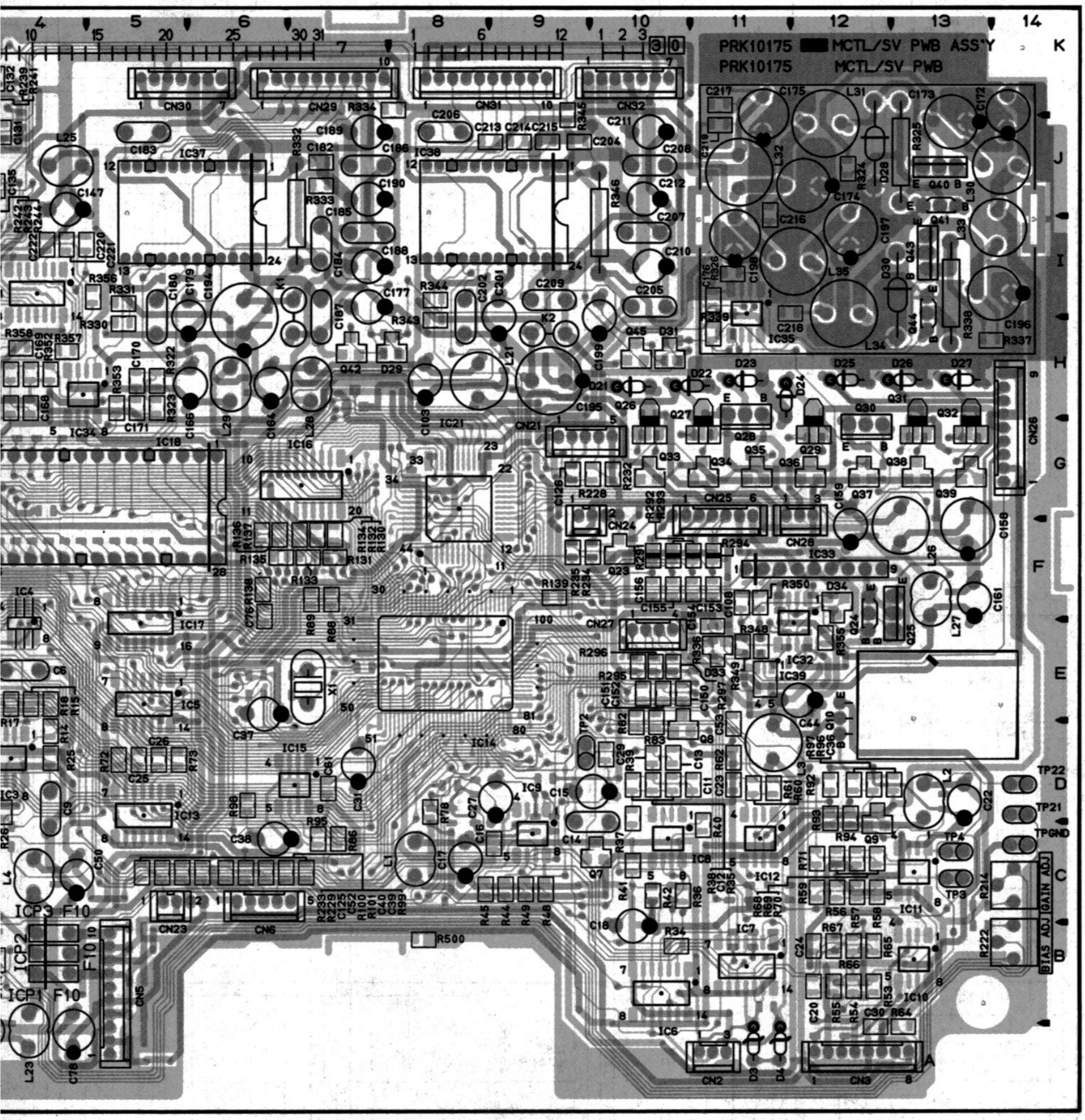
SYMBOL	No.	REC	PB
CN4	1	5.1	0.0
	2	2.4	2.4
	3	0.0	0.0
	4	4.9	4.9
	5	4.2	4.2
	6	0.0	0.0
CN5	1	19.0	19.0
	2	19.0	19.0
	3	13.5	13.5
	4	13.5	13.5
	5	0.0	0.0
	6	0.0	0.0
	7	12.3	12.3
	8	0.0	0.0
	9	12.9	12.9
	10	5.2	5.2
CN6	1	13.5	13.5
	2	0.0	0.0
	3	0.0	0.0
	4	2.7	2.7
	5	3.9	3.9
CN7	1	2.4	2.4
	2	0.0	0.0
	3	0.5	0.5
	4	0.0	0.0
	5	0.2	0.2
	6	0.0	0.0
	7	4.0	4.0
	8	0.0	0.0
	9	5.1	0.0
	10	0.0	0.0
	11	2.4	2.4
	12	2.4	2.4
	13	0.2	2.4
	14	—	0.9
	15	3.2	3.2
	16	5.2	5.2
	17	4.1	4.1
	18	5.0	5.0
CN21	1	12.8	12.8
	2	4.9	0.0
	3	0.0	0.0
	4	4.8	4.8
	5	0.0	0.0
CN22	1	4.2	4.2
	2	2.5	2.5
	3	4.0	4.0
	4	5.8	5.8
CN23	1	0.0	0.0
	2	0.0	0.0
CN24	1	0.0	0.0
	2	0.0	0.0
CN25	1	0.0	0.0
	2	0.0	4.9
	3	0.0	0.0
	4	0.0	4.8
	5	0.0	0.0
	6	0.0	0.0
CN26	1	0.3	0.3
	2	0.0	0.0
	3	0.2	—
	4	0.9	—
	5	0.0	0.0
	6	0.0	0.0
	7	1.6	1.6
	8	18.9	18.9
	9	0.0	0.0
CN27	1	0.0	0.0
	2	0.0	0.0
	3	4.8	4.8
	4	0.0	0.0
CN29	1	0.0	3.0
	2	1.7	1.7
	3	0.0	0.0
	4	0.0	0.0
	5	2.3	2.3
	6	2.3	2.3
	7	2.3	2.3
	8	2.3	2.3
	9	12.6	12.6
	10	0.0	0.0
CN30	1	5.0	5.0
	2	2.5	2.5
	3	0.0	0.0
	4	2.5	2.5
	5	—	—
	6	—	—
	7	—	—
CN31	1	4.9	4.9
	2	3.7	3.7
	3	3.0	3.0
	4	1.7	1.7
	5	0.0	0.0
	6	2.4	2.4
	7	2.4	2.4
	8	2.4	2.4
	9	2.4	2.4
	10	2.4	2.4
CN32	1	—	—
	2	—	—
	3	—	—
	4	5.0	5.0
	5	2.5	2.5
	6	0.0	0.0
	7	2.5	2.5


1
2
3
4
5
10
CN7
CN6
CN4
CN1
CN22
IC26
IC28
IC25
IC31
IC40
IC41
IC2
IC1
IC4
IC3
IC24
IC36
IC22
IC23
ICP1
ICP2
ICP3
Q11
Q12
Q1
Q2
Q3
D35
D1
D2
D32
TP1
SP
L25
L22
L23
L4
R110
R109
R127
R108
R126
R125
R124
R123
R122
R121
R102
R103
R104
C41
C42
C227
R264
R263
R265
C139
R240
C132
R239
R241
C140
C131
R249
R251
R273
R274
R275
C143
R250
C135
R242
R243
R244
C222
R253
R252
R245
R255
R254
C133
R266
R276
R277
R278
R269
R268
R149
R267
R358
R357
C169
R352
R279
R359
R360
R363
R320
R321
C158
R362
R361
R364
R365
R366
R23
R24
R20
R19
R21
C7
C8
R22
C54
C3
R5
R7
R13
R10
R12
C6
R115
R114
R117
R116
R112
R113
R3
R4
R6
R8
R9
C5
C4
R11
R17
R16
R18
R15
R14
R25
C9
R2
R1
C1
C2
R111
C77
C122
R225
R224
R30
R31
R27
R28
R29
R26
C16
C121
R220
C119
C110
R215
R351
C123
C113
C114
C111
C106
R207
C105
C107
C118
C78
F10
F1

— MAIN WAVEFORMS OF M-CTL/R-SERVO CIRCU

TP1	TP2	TP3 & TP4
		
4.9 Vp-p (30 HZ)	[PB] 2.1 Vp-p (30 Hz)	UPPER : TP4 LOWER : TP3

— PARTS Side —


PRK10175 MCTL/SV PWB ASS'Y
PRK10175 MCTL/SV PWB
4
5
6
7
8
9
10
11
12
13
14
K
J
I
H
G
F
E
D
C
B
A
CN30
CN29
CN31
CN32
CN26
CN25
CN28
CN24
CN27
CN23
CN6
CN5
CN2
CN3
CN21
IC37
IC38
IC35
IC34
IC18
IC16
IC21
IC33
IC32
IC39
IC17
IC5
IC15
IC14
IC13
IC9
IC8
IC12
IC7
IC6
IC11
IC10
IC4
IC3
ICP1
ICP2
ICP3
F10
X1
L1
L4
L23
L25
L26
L27
L28
L31
L32
L34
L35
L36
L39
L3
L2
TP2
TP3
TP4
TP21
TP22
TPGND
GAIN ADJ
BIAS ADJ
R214
R222
R500
K1
K2

CIRCUIT —

TP4

TP4
: TP3

6

4.34 M-CTL/SERVO SCHEMATIC DIAGRAM

— DIAGRAM (1/2) —

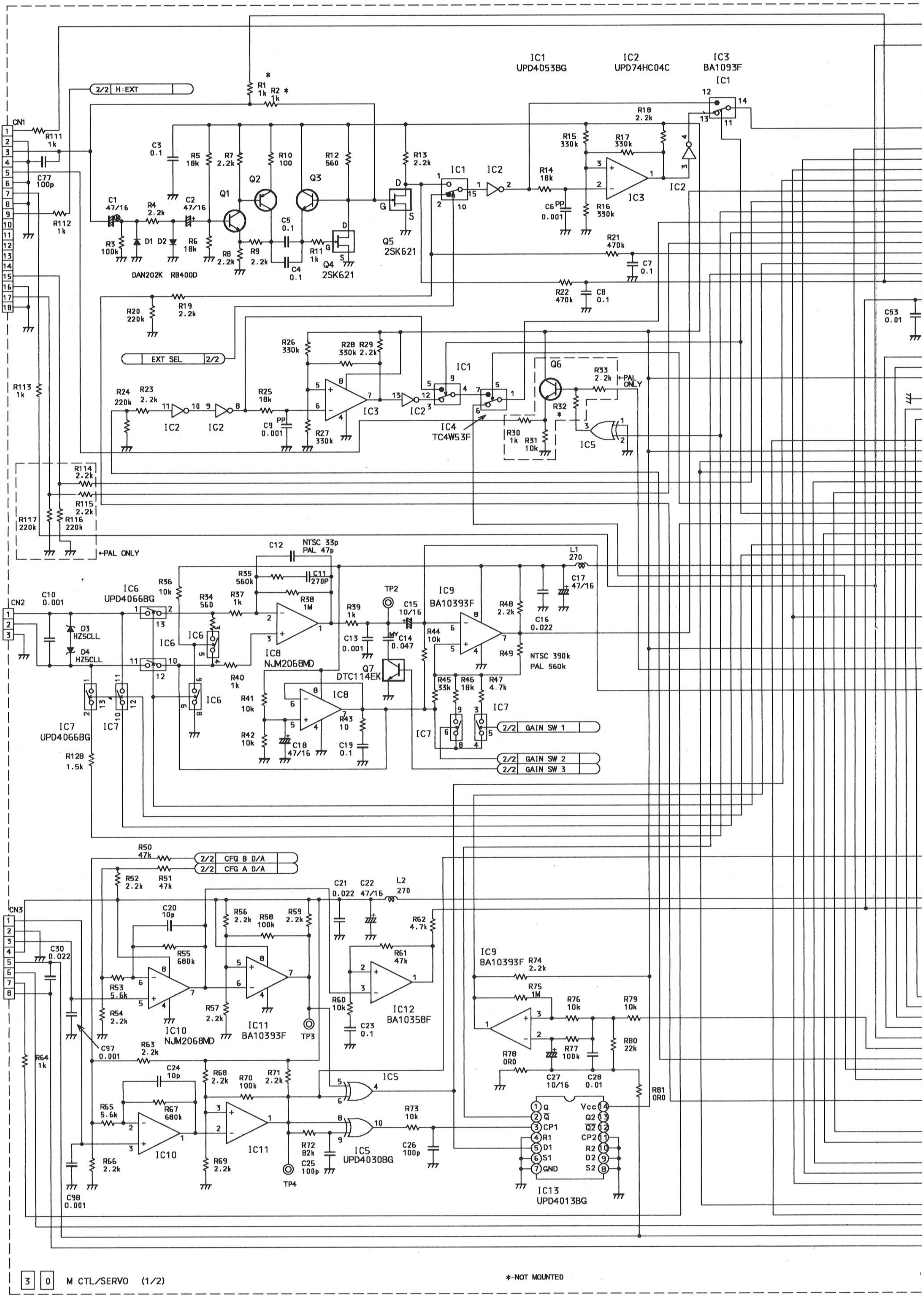
5

4

3

2

1

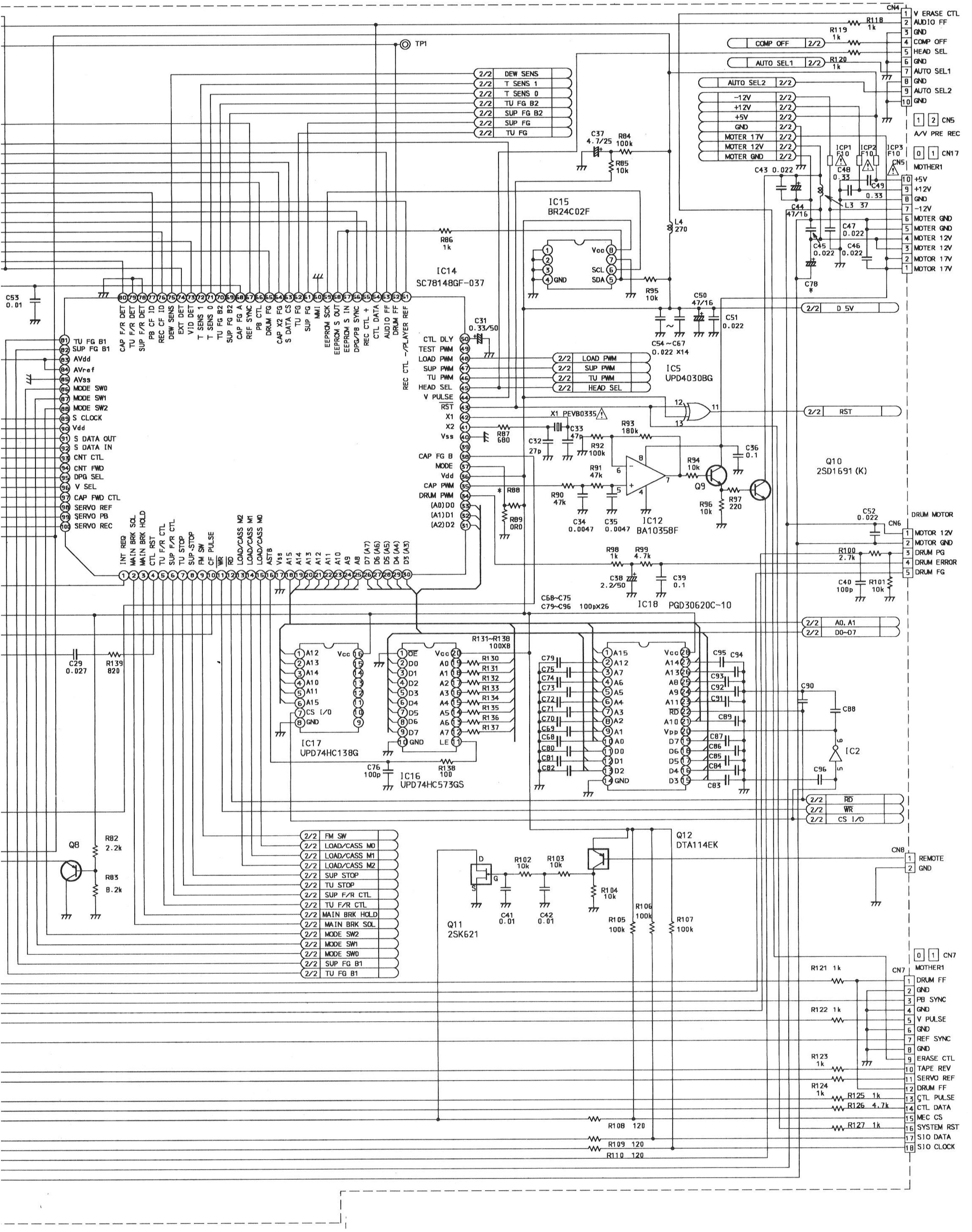


0 1 CN8
MOTHER1
CN1
AUDIO FF 1
GND 2
EXT REF 3
GND 4
PLAYRE REF 5
GND 6
DRUM FF 7
GND 8
H:EXT 9
10
11
12
13
14
PB CF ID 15
GND 16
REC CF ID 17
GND 18
2/2 H:EXT
R111 1k
C77 100p
R112 1k
IC1 UPD4053BG
IC2 UPD74HC04C
IC3 BA1093F
R1 1k *
R2 1k *
C3 0.1
R5 18k
R7 2.2k
R10 100
R12 560
R13 2.2k
Q1
Q2
Q3
C1 47/16
R4 2.2k
C2 47/16
R3 100k
D1
D2
R6 18k
DAN202K
R8400D
R8 2.2k
R9 2.2k
C5 0.1
C4 0.1
R11 1k
Q4 2SK621
Q5 2SK621
IC1
IC2
R18 2.2k
R15 330k
R17 330k
R14 18k
C6 0.001 PP
R16 330k
IC3
R21 470k
C7 0.1
R22 470k
C8 0.1
R20 220k
R19 2.2k
EXT SEL 2/2
R26 330k
R28 330k
R29 2.2k
R24 220k
R23 2.2k
R25 18k
C9 0.001 PP
R27 330k
IC2
IC3
IC1
IC4 TC4W53F
Q6
R33 2.2k
←PAL ONLY
R32 *
R30 1k
R31 10k
IC5
C53 0.01
R113 1k
R114 2.2k
R115 2.2k
R117 220k
R116 220k
←PAL ONLY
5 6 CN11
A/C HEAD
CN2
CTL HEAD + 1
CTL HEAD − 2
GND 3
C10 0.001
D3 HZ5CLL
D4 HZ5CLL
IC6 UPD4066BG
R36 10k
R34 560
R37 1k
R35 560k
C12
NTSC 33p PAL 47p
C11 270P
R38 1M
IC8 NJM2068MD
R39 1k
C13 0.001
TP2
C15 10/16
C14 0.047
Q7 DTC114EK
IC9 BA10393F
R44 10k
R48 2.2k
C16 0.022
L1 270
C17 47/16
R49
NTSC 390k PAL 560k
R40 1k
R41 10k
R42 10k
C18 47/16
IC8
R43 10
C19 0.1
R45 33k
R46 18k
R47 4.7k
IC7
2/2 GAIN SW 1
2/2 GAIN SW 2
2/2 GAIN SW 3
IC7 UPD4066BG
R128 1.5k
R50 47k
2/2 CFG B D/A
2/2 CFG A D/A
R52 2.2k
R51 47k
CAP MOTOR
CN3
MR CFG B 1
GND 2
MR CFG A 3
MR 5V 4
MOTER 12V 5
CAP ERROR 6
CAP FWD CTL 7
MOTER GND 8
C30 0.022
C20 10p
R55 680k
R53 5.6k
R54 2.2k
IC10 NJM2068MD
C97 0.001
R56 2.2k
R58 100k
R59 2.2k
R57 2.2k
IC11 BA10393F
TP3
C21 0.022
C22 47/16
L2 270
R62 4.7k
R61 47k
R60 10k
C23 0.1
IC12 BA10358F
IC9 BA10393F
R74 2.2k
R75 1M
R76 10k
R79 10k
R80 22k
R77 100k
R78 0R0
C27 10/16
C28 0.01
R81 0R0
R64 1k
R63 2.2k
C24 10p
R65 5.6k
R67 680k
R66 2.2k
IC10
C98 0.001
R68 2.2k
R70 100k
R71 2.2k
R69 2.2k
IC11
TP4
IC5
R72 82k
C25 100p
IC5 UPD4030BG
R73 10k
C26 100p
1 Q
2 Q̄
3 CP1
4 R1
5 D1
6 S1
7 GND
Vcc 14
Q2 13
Q̄2 12
CP2 11
R2 10
D2 9
S2 8
IC13 UPD4013BG

3 0 M CTL/SERVO (1/2)

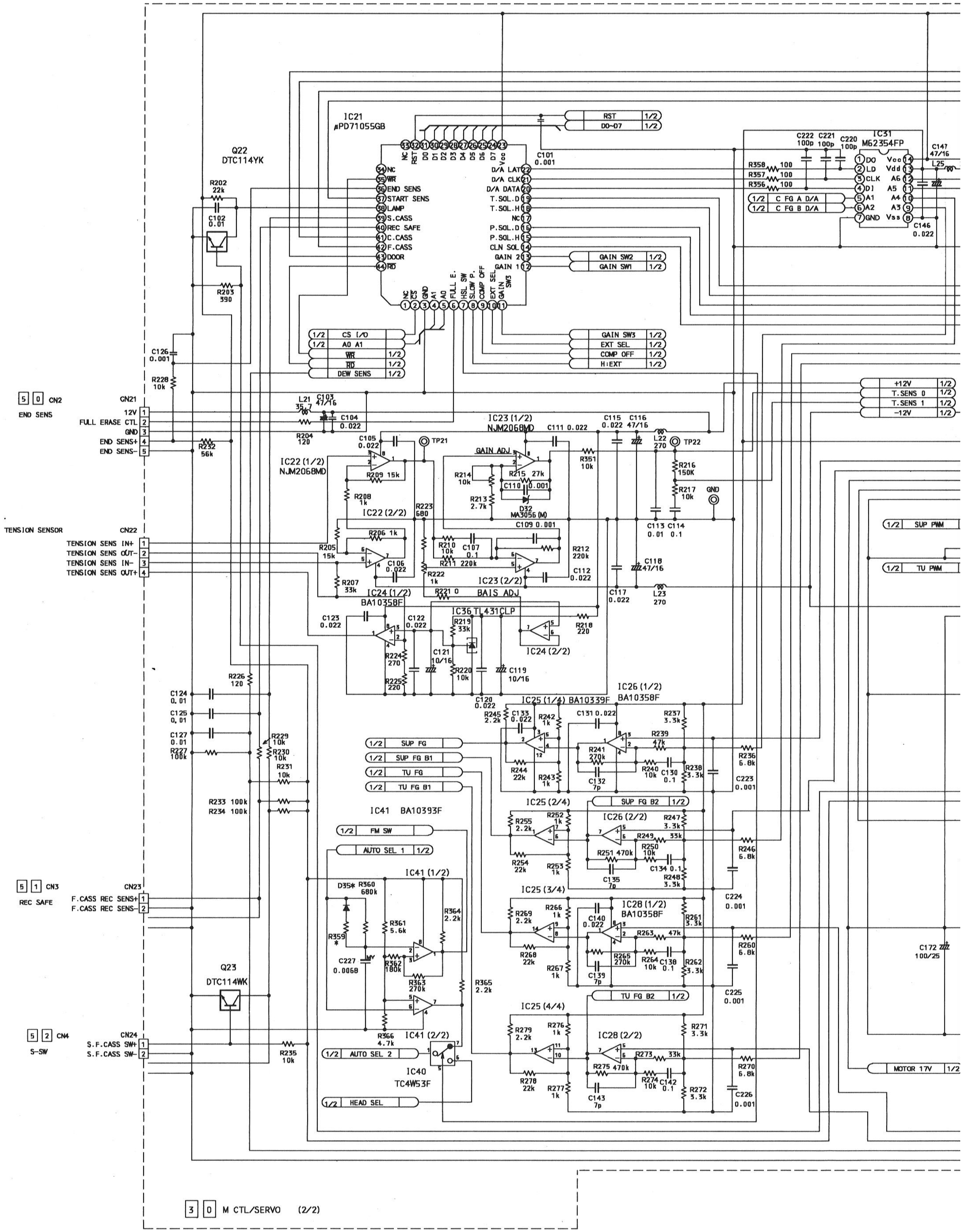
*-NOT MOUNTED

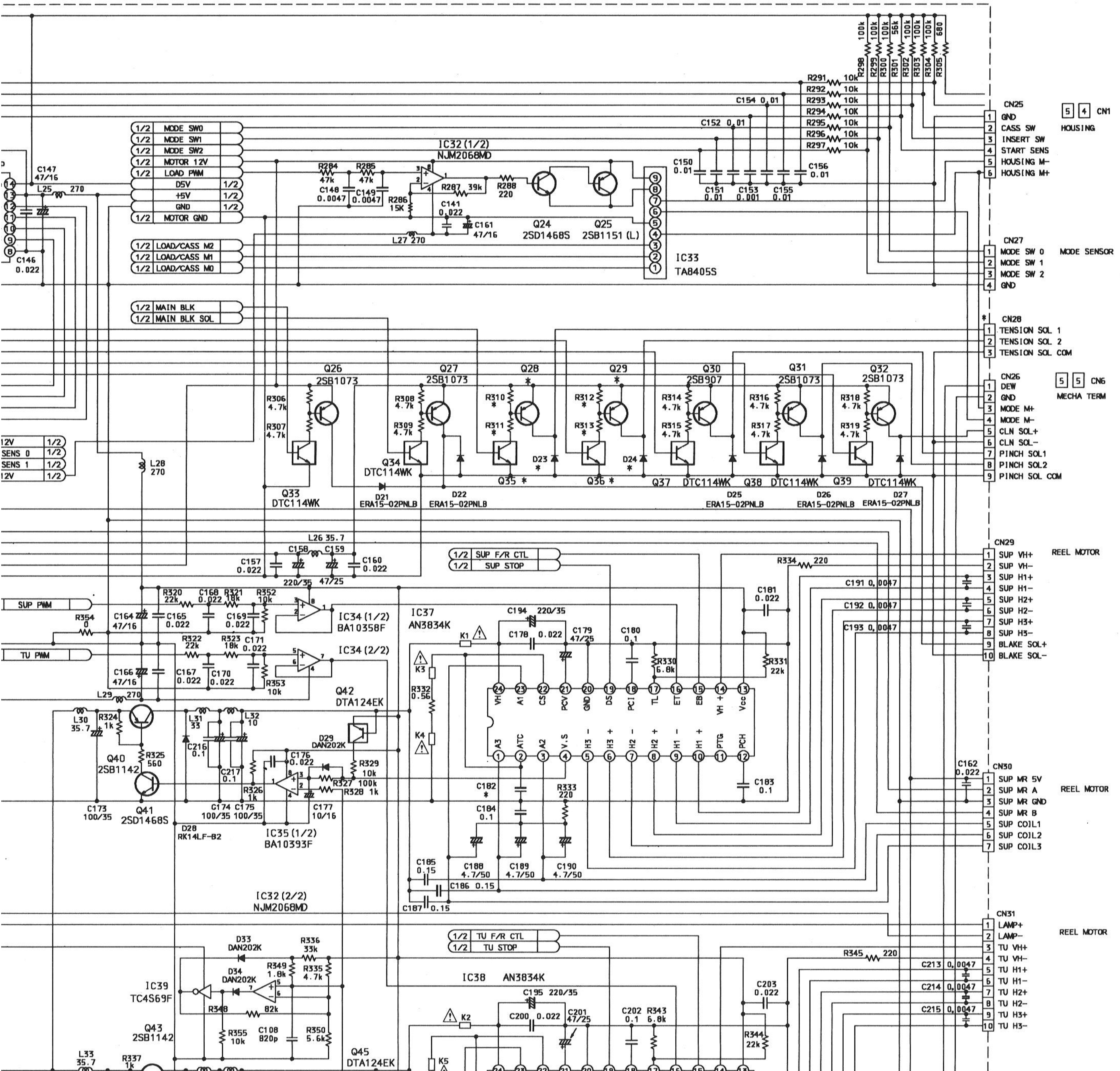
A	B	C



IC14
SC78148GF-037
IC15
BR24C02F
IC5
UPD4030BG
IC12
BA10358F
IC17
UPD74HC138G
IC16
UPD74HC573GS
IC18 PGD30620C-10
IC2
Q8
Q9
Q10
2SD1691 (K)
Q11
2SK621
Q12
DTA114EK
TP1
X1 PEVB0335
CN4
V ERASE CTL
AUDIO FF
GND
COMP OFF
HEAD SEL
AUTO SEL1
AUTO SEL2
CN5
A/V PRE REC
CN17
MOTHER1
+5V
+12V
-12V
MOTER GND
MOTER 12V
MOTOR 17V
CN6
DRUM MOTOR
MOTOR 12V
MOTOR GND
DRUM PG
DRUM ERROR
DRUM FG
CN7
DRUM FF
PB SYNC
V PULSE
REF SYNC
ERASE CTL
TAPE REV
SERVO REF
CTL PULSE
CTL DATA
MEC CS
SYSTEM RST
SIO DATA
SIO CLOCK
CN8
REMOTE
DEW SENS
T SENS 1
T SENS 0
TU FG B2
SUP FG B2
SUP FG
TU FG
COMP OFF
AUTO SEL1
AUTO SEL2
MOTER 17V
MOTER 12V
MOTER GND
D 5V
LOAD PWM
SUP PWM
TU PWM
HEAD SEL
RST
A0, A1
D0~D7
RD
WR
CS I/O
FM SW
LOAD/CASS M0
LOAD/CASS M1
LOAD/CASS M2
SUP STOP
TU STOP
SUP F/R CTL
TU F/R CTL
MAIN BRK HOLD
MAIN BRK SOL
MODE SW2
MODE SW1
MODE SW0
SUP FG B1
TU FG B1
CAP F/R DET
TU F/R DET
SUP F/R DET
PB CF ID
REC CF ID
DEW SENS
EXT DET
VID DET
T SENS 1
T SENS 0
TU FG B2
SUP FG B2
CAP FG A
REF SYNC
PB CTL
DRUM FG
CAP X2 FG
S DATA CS
TU FG
SUP FG
NMI
EEPROM SCK
EEPROM S OUT
EEPROM S IN
DPG/PB SYNC
REC CTL +
CTL DATA
AUDIO FF
DRUM FF
REC CTL -/PLAYER REF
AVdd
AVref
AVss
MODE SW0
MODE SW1
MODE SW2
S CLOCK
Vdd
S DATA OUT
S DATA IN
CNT CTL
CNT FWD
DPG SEL
V SEL
CAP FWD CTL
SERVO REF
SERVO PB
SERVO REC
CTL DLY
TEST PWM
V PULSE
X1
X2
Vss
CAP FG B
MODE
CAP PWM
DRUM PWM
(A0)D0
(A1)D1
(A2)D2
INT REQ
CTL RST
SUP-STOP
FM SW
CF PULSE
ASTB
D7 (A7)
D6 (A6)
D5 (A5)
D4 (A4)
D3 (A3)
R131~R138 100X8
C54~C67 0.022 X14
C68~C75 C79~C96 100pX26
C53 0.01
C29 0.027
R139 820
R82 2.2k
R83 8.2k
C37 4.7/25
R84 100k
R85 10k
R86 1k
R95 10k
L4 270
C31 0.33/50
C50 47/16
C51 0.022
R87 680
C32 27p
C33 47p
R92 100k
R93 180k
R91 47k
R90 47k
C34 0.0047
C35 0.0047
R88
R89 0R0
R94 10k
R96 10k
R97 220
C36 0.1
C43 0.022
C48 0.33
C49 0.33
L3 37
C44 47/16
C47 0.022
C45 0.022
C46 0.022
C78
ICP1 F10
ICP2 F10
ICP3 F10
R118 1k
R119 1k
R120 1k
C52 0.022
R100 2.7k
C40 100p
R101 10k
R98 1k
R99 4.7k
C38 2.2/50
C39 0.1
C76 100p
R138 100
R102 10k
R103 10k
R104 10k
C41 0.01
C42 0.01
R105 100k
R106 100k
R107 100k
R108 120
R109 120
R110 120
R121 1k
R122 1k
R123 1k
R124 1k
R125 1k
R126 4.7k
R127 1k
E
F
G
H

— DIAGRAM (2/2) —

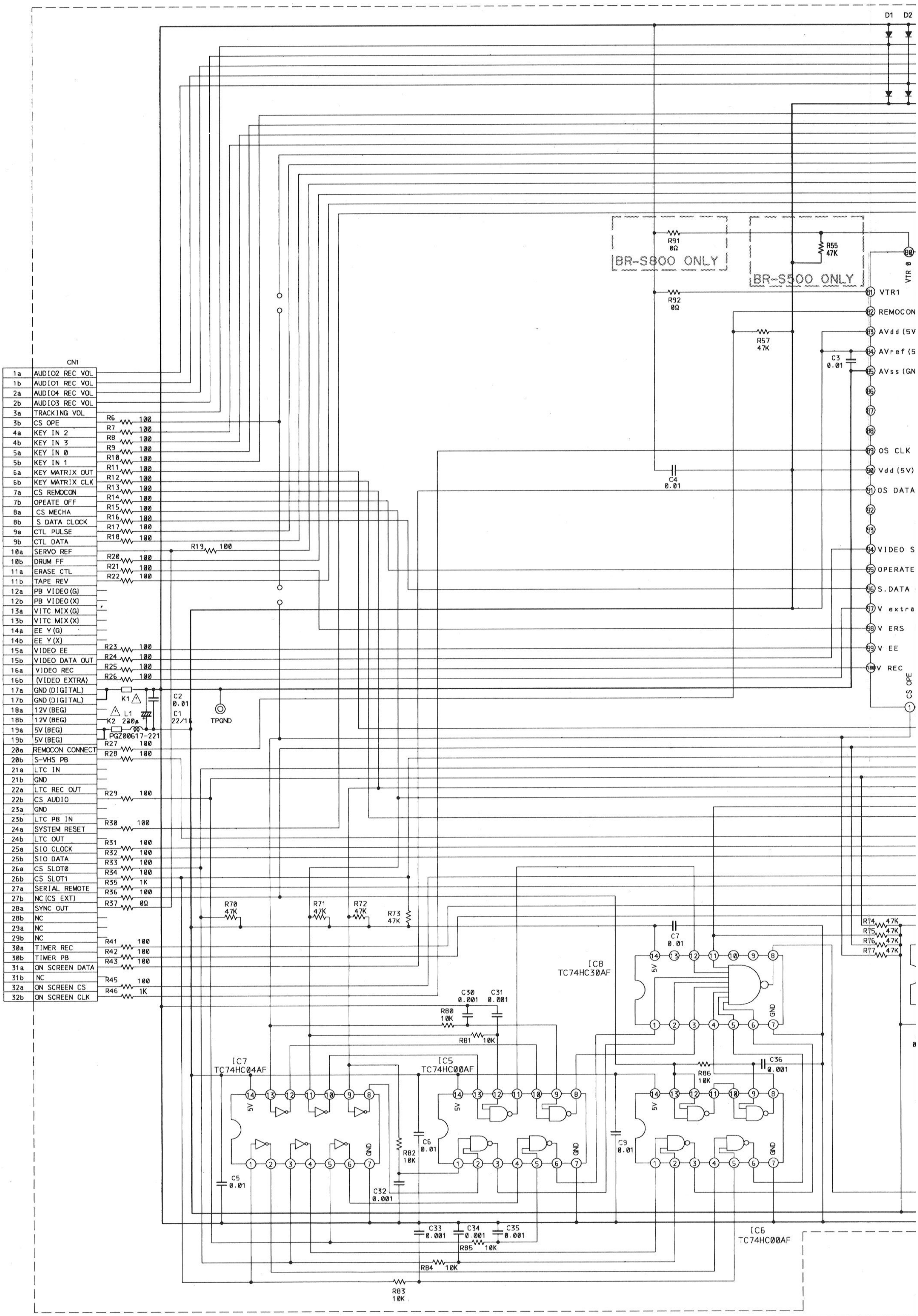

IC21 µPD71055GB
Q22 DTC114YK
RST 1/2
D0~D7 1/2
NC
WR
END SENS
START SENS
LAMP
S.CASS
REC SAFE
C.CASS
F.CASS
DOOR
RD
D/A LAT
D/A CLK
D/A DATA
T.SOL.D
T.SOL.H
P.SOL.D
P.SOL.H
CLN SOL
GAIN 2
GAIN 1
GAIN SW2 1/2
GAIN SW1 1/2
CS I/O 1/2
A0 A1 1/2
WR 1/2
RD 1/2
DEW SENS 1/2
GAIN SW3 1/2
EXT SEL 1/2
COMP OFF 1/2
H:EXT 1/2
IC31 M62354FP
C FG A D/A 1/2
C FG B D/A 1/2
+12V 1/2
T.SENS 0 1/2
T.SENS 1 1/2
-12V 1/2
SUP PWM 1/2
TU PWM 1/2
5 0 CN2 END SENS
CN21
12V
FULL ERASE CTL
GND
END SENS+
END SENS-
IC23 (1/2) NJM2068MD
GAIN ADJ.
TP21
TP22
GND
IC22 (1/2) NJM2068MD
IC22 (2/2)
D32 MA3056 (M)
TENSION SENSOR CN22
TENSION SENS IN+
TENSION SENS OUT-
TENSION SENS IN-
TENSION SENS OUT+
IC23 (2/2)
BAIS ADJ
IC24 (1/2) BA10358F
IC36 TL431CLP
IC24 (2/2)
IC26 (1/2) BA10358F
IC25 (1/4) BA10339F
SUP FG 1/2
SUP FG B1 1/2
TU FG 1/2
TU FG B1 1/2
IC41 BA10393F
FM SW 1/2
AUTO SEL 1 1/2
IC25 (2/4)
SUP FG B2 1/2
IC26 (2/2)
5 1 CN3 REC SAFE
CN23
F.CASS REC SENS+
F.CASS REC SENS-
IC41 (1/2)
IC25 (3/4)
IC28 (1/2) BA10358F
Q23 DTC114WK
TU FG B2 1/2
IC25 (4/4)
5 2 CN4 S-SW
CN24
S.F.CASS SW+
S.F.CASS SW-
IC41 (2/2)
AUTO SEL 2 1/2
IC40 TC4W53F
IC28 (2/2)
HEAD SEL 1/2
MOTOR 17V 1/2
3 0 M CTL/SERVO (2/2)
6
5
4
3
2
1
A
B
C

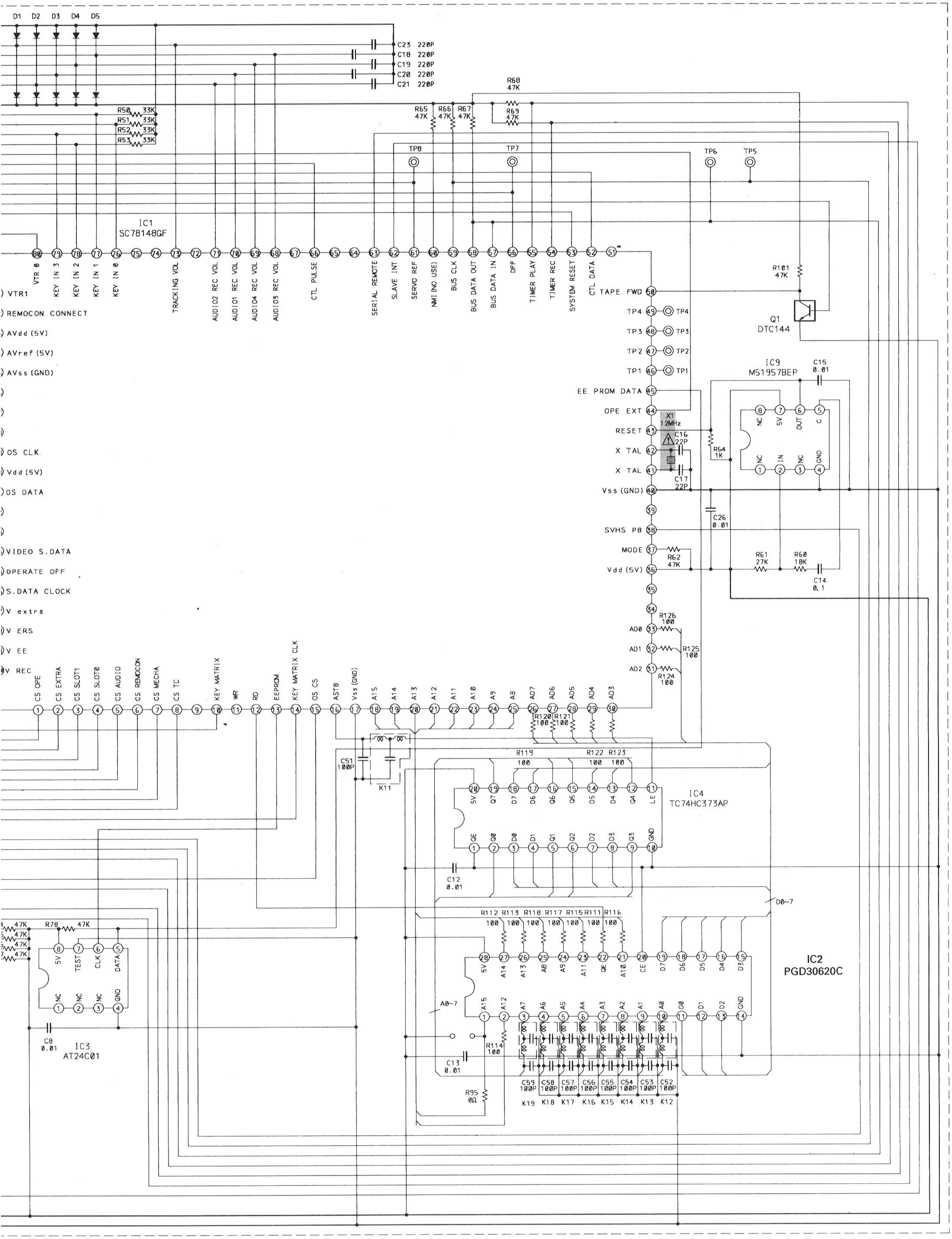


CN25
1 GND
2 CASS SW
3 INSERT SW
4 START SENS
5 HOUSING M−
6 HOUSING M+
5 4 CN1 HOUSING
CN27
1 MODE SW 0
2 MODE SW 1
3 MODE SW 2
4 GND
MODE SENSOR
CN28
1 TENSION SOL 1
2 TENSION SOL 2
3 TENSION SOL COM
CN26
1 DEW
2 GND
3 MODE M+
4 MODE M−
5 CLN SOL+
6 CLN SOL−
7 PINCH SOL1
8 PINCH SOL2
9 PINCH SOL COM
5 5 CN6 MECHA TERM
CN29
1 SUP VH+
2 SUP VH−
3 SUP H1+
4 SUP H1−
5 SUP H2+
6 SUP H2−
7 SUP H3+
8 SUP H3−
9 BLAKE SOL+
10 BLAKE SOL−
REEL MOTOR
CN30
1 SUP MR 5V
2 SUP MR A
3 SUP MR GND
4 SUP MR B
5 SUP COIL1
6 SUP COIL2
7 SUP COIL3
REEL MOTOR
CN31
1 LAMP+
2 LAMP−
3 TU VH+
4 TU VH−
5 TU H1+
6 TU H1−
7 TU H2+
8 TU H2−
9 TU H3+
10 TU H3−
REEL MOTOR
CN32
1 TU COIL1
2 TU COIL2
3 TU COIL3
4 TU MR 5V
5 TU MR A
6 TU MR GND
7 TU MR B
REEL MOTOR
1/2 MODE SW0
1/2 MODE SW1
1/2 MODE SW2
1/2 MOTOR 12V
1/2 LOAD PWM
D5V 1/2
+5V 1/2
GND 1/2
1/2 MOTOR GND
1/2 LOAD/CASS M2
1/2 LOAD/CASS M1
1/2 LOAD/CASS M0
1/2 MAIN BLK
1/2 MAIN BLK SOL
12V 1/2
SENS 0 1/2
SENS 1 1/2
12V 1/2
SUP PWM
TU PWM
1/2 SUP F/R CTL
1/2 SUP STOP
1/2 TU F/R CTL
1/2 TU STOP
OTOR 17V 1/2
IC32 (1/2) NJM2068MD
IC32 (2/2) NJM2068MD
IC33 TA8405S
Q24 2SD1468S
Q25 2SB1151 (L)
Q26 2SB1073
Q27 2SB1073
Q28 *
Q29 *
Q30 2SB907
Q31 2SB1073
Q32 2SB1073
Q33 DTC114WK
Q34 DTC114WK
Q35 *
Q36 *
Q37 DTC114WK
Q38 DTC114WK
Q39 DTC114WK
D21 ERA15-02PNLB
D22 ERA15-02PNLB
D23 *
D24 *
D25 ERA15-02PNLB
D26 ERA15-02PNLB
D27 ERA15-02PNLB
IC34 (1/2) BA10358F
IC34 (2/2)
IC35 (1/2) BA10393F
IC35 (2/2)
IC37 AN3834K
IC38 AN3834K
IC39 TC4S69F
Q40 2SB1142
Q41 2SD1468S
Q42 DTA124EK
Q43 2SB1142
Q44 2SD1468S
Q45 DTA124EK
D28 RK14LF-B2
D29 DAN202K
D30 RK14LF-B2
D31 DAN202K
D33 DAN202K
D34 DAN202K
VH A1 CS PCV GND DS PC1 TL ET EB VH+ Vcc
A3 ATC A2 V.S H3− H3+ H2− H2+ H1− H1+ PTG PCH
K1 K2 K3 K4 K5 K6
R291 10k R292 10k R293 10k R294 10K R295 10k R296 10k R297 10k
R298 100k R299 100k R300 100k R301 56k R302 100k R303 100k R304 100k R305 680
C154 0.01 C152 0.01 C150 0.01 C151 0.01 C153 0.001 C155 0.01 C156 0.01
C147 47/16 L25 270 C146 0.022
R284 47k R285 47k C148 0.0047 C149 0.0047 R286 15K R287 39k R288 220 C141 0.022 C161 47/16 L27 270
R306 4.7k R307 4.7k R308 4.7k R309 4.7k R310 * R311 * R312 * R313 * R314 4.7k R315 4.7k R316 4.7k R317 4.7k R318 4.7k R319 4.7k
L28 270 L26 35.7 C157 0.022 C158 220/35 C159 47/25 C160 0.022
R320 22k C168 0.022 R321 18k R352 10k C164 47/16 C165 0.022 C169 0.022 R354 0
R322 22k R323 18k C171 0.022 C166 47/16 C167 0.022 C170 0.022 R353 10k
L29 270 L30 35.7 R324 1k R325 560 C173 100/35 L31 33 L32 10 C216 0.1 C217 0.1 C174 C175 100/35 100/35
C176 0.022 R326 1k R327 100k R328 1k R329 10k C177 10/16
R334 220 C181 0.022 C191 0.0047 C192 0.0047 C193 0.0047 C194 220/35 C178 0.022 C179 47/25 C180 0.1 R330 6.8k R331 22k R332 0.56
C162 0.022 C182 * C183 0.1 C184 0.1 R333 220 C185 0.15 C186 0.15 C187 0.15 C188 4.7/50 C189 4.7/50 C190 4.7/50
R336 33k R349 1.8k R335 4.7k R348 82k R355 10k C108 820p R350 5.6k
L33 35.7 R337 1k C172 100/25 C196 100/35 R338 560 L34 33 L35 10 C198 100/35 C218 0.1 C219 0.1 R339 1k R341 100k R342 10k C199 10/16 R340 1k C197 100/35V
R345 220 C213 0.0047 C214 0.0047 C215 0.0047 C203 0.022 C195 220/35 C200 0.022 C201 47/25 C202 0.1 R343 6.8k R344 22k R346 0.56
C163 0.022 C204 * C205 0.1 R347 220 C206 0.1 C207 0.15 C210 4.7/50 C211 4.7/50 C212 4.7/50 C208 0.15 C209 0.15

*:NOT MOUNTED

4.35 SYSCON SCHEMATIC DIAGRAM

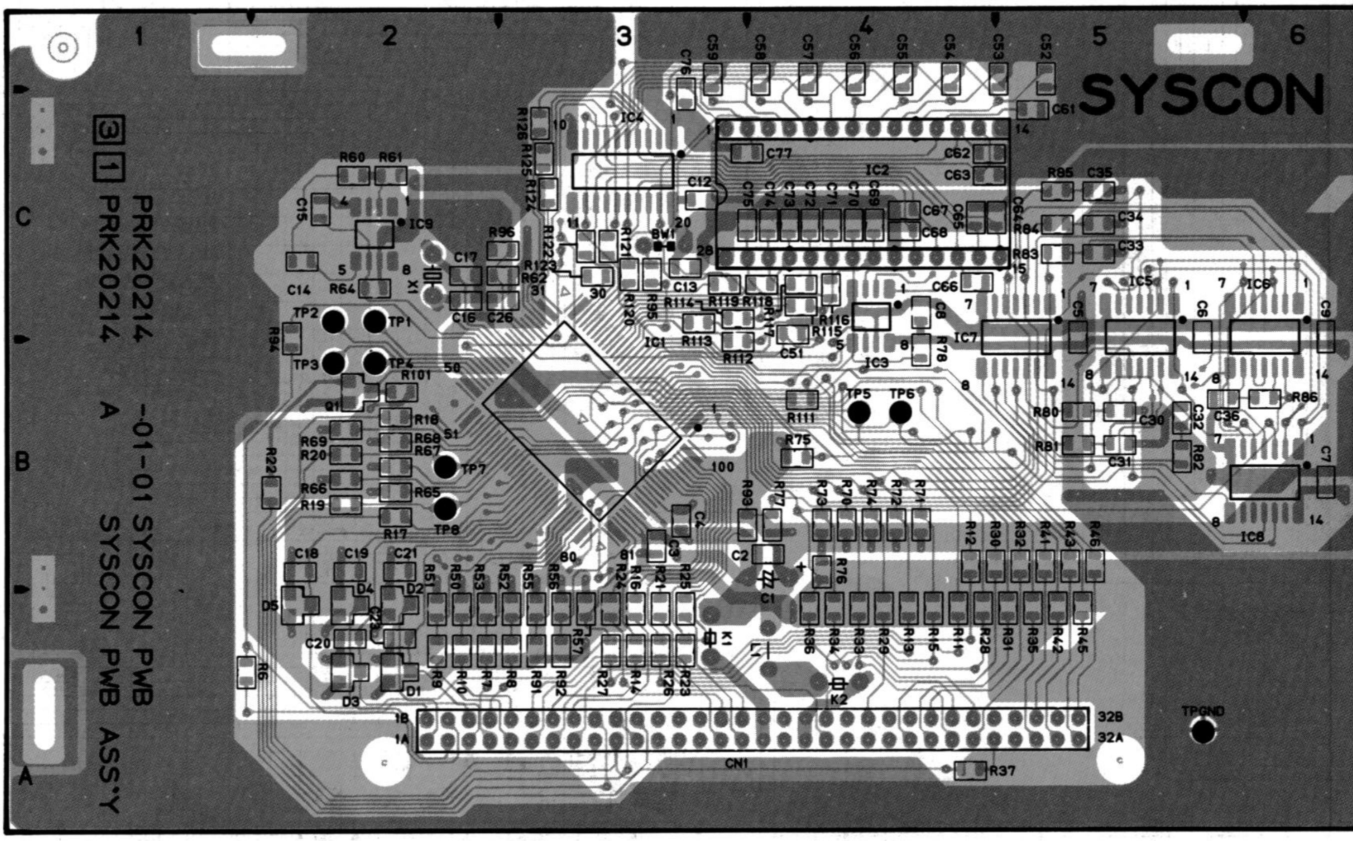

CN1
1a AUDIO2 REC VOL
1b AUDIO1 REC VOL
2a AUDIO4 REC VOL
2b AUDIO3 REC VOL
3a TRACKING VOL
3b CS OPE
4a KEY IN 2
4b KEY IN 3
5a KEY IN 0
5b KEY IN 1
6a KEY MATRIX OUT
6b KEY MATRIX CLK
7a CS REMOCON
7b OPEATE OFF
8a CS MECHA
8b S DATA CLOCK
9a CTL PULSE
9b CTL DATA
10a SERVO REF
10b DRUM FF
11a ERASE CTL
11b TAPE REV
12a PB VIDEO(G)
12b PB VIDEO(X)
13a VITC MIX(G)
13b VITC MIX(X)
14a EE Y(G)
14b EE Y(X)
15a VIDEO EE
15b VIDEO DATA OUT
16a VIDEO REC
16b (VIDEO EXTRA)
17a GND(DIGITAL)
17b GND(DIGITAL)
18a 12V(BEG)
18b 12V(BEG)
19a 5V(BEG)
19b 5V(BEG)
20a REMOCON CONNECT
20b S-VHS PB
21a LTC IN
21b GND
22a LTC REC OUT
22b CS AUDIO
23a GND
23b LTC PB IN
24a SYSTEM RESET
24b LTC OUT
25a SIO CLOCK
25b SIO DATA
26a CS SLOT0
26b CS SLOT1
27a SERIAL REMOTE
27b NC(CS EXT)
28a SYNC OUT
28b NC
29a NC
29b NC
30a TIMER REC
30b TIMER PB
31a ON SCREEN DATA
31b NC
32a ON SCREEN CS
32b ON SCREEN CLK
R6 100
R7 100
R8 100
R9 100
R10 100
R11 100
R12 100
R13 100
R14 100
R15 100
R16 100
R17 100
R18 100
R19 100
R20 100
R21 100
R22 100
R23 100
R24 100
R25 100
R26 100
K1
K2 220μ
L1
PGZ00617-221
C2 0.01
C1 22/16
TPGND
R27 100
R28 100
R29 100
R30 100
R31 100
R32 100
R33 100
R34 100
R35 1K
R36 100
R37 0Ω
R41 100
R42 100
R43 100
R45 100
R46 1K
R70 47K
R71 47K
R72 47K
R73 47K
R91 0Ω
R92 0Ω
BR-S800 ONLY
R55 47K
BR-S500 ONLY
R57 47K
C3 0.01
C4 0.01
D1
D2
80 VTR 0
81 VTR1
82 REMOCON
83 AVdd(5V
84 AVref(5
85 AVss(GN
86
87
88
89 OS CLK
90 Vdd(5V)
91 OS DATA
92
93
94 VIDEO S
95 OPERATE
96 S.DATA
97 V extra
98 V ERS
99 V EE
100 V REC
1 CS OPE
R74 47K
R75 47K
R76 47K
R77 47K
C7 0.01
IC8 TC74HC30AF
C30 0.001
C31 0.001
R80 10K
R81 10K
IC7 TC74HC04AF
IC5 TC74HC00AF
R86 10K
C36 0.001
R82 10K
C6 0.01
C9 0.01
C5 0.01
C32 0.001
C33 0.001
C34 0.001
C35 0.001
R85 10K
R84 10K
R83 10K
IC6 TC74HC00AF
5V
GND
6
5
4
3
2
1
A
B
C

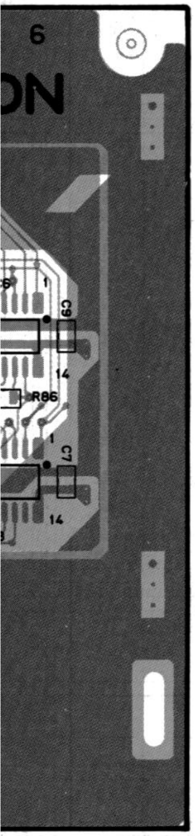

D1 D2 D3 D4 D5
C23 220P
C18 220P
C19 220P
C20 220P
C21 220P
R68 47K
R69 47K
R65 47K
R66 47K
R67 47K
R50 33K
R51 33K
R52 33K
R53 33K
TP8
TP7
TP6
TP5
IC1
SC78148GF
VTR 0
KEY IN 3
KEY IN 2
KEY IN 1
KEY IN 0
TRACKING VOL
AUDIO2 REC VOL
AUDIO1 REC VOL
AUDIO4 REC VOL
AUDIO3 REC VOL
CTL PULSE
SERIAL REMOTE
SLAVE INT
SERVO REF
NMI (NO USE)
BUS CLK
BUS DATA OUT
BUS DATA IN
DFF
TIMER PLAY
TIMER REC
SYSTEM RESET
CTL DATA
R101 47K
Q1
DTC144
TAPE FWD
TP4
TP3
TP2
TP1
EE PROM DATA
OPE EXT
RESET
X TAL
X TAL
Vss (GND)
SVHS PB
MODE
Vdd (5V)
X1 12MHz
C16 22P
C17 22P
R64 1K
C26 0.01
R62 47K
IC9
M51957BEP
C15 0.01
NC 5V OUT C
NC IN NC GND
R61 27K
R60 18K
C14 0.1
R126 100
R125 100
R124 100
AD0
AD1
AD2
VTR1
REMOCON CONNECT
AVdd (5V)
AVref (5V)
AVss (GND)
OS CLK
Vdd (5V)
OS DATA
VIDEO S.DATA
OPERATE OFF
S.DATA CLOCK
V extra
V ERS
V EE
V REC
CS OPE
CS EXTRA
CS SLOT1
CS SLOT0
CS AUDIO
CS REMOCON
CS MECHA
CS TC
KEY MATRIX
WR
RD
EEPROM
KEY MATRIX CLK
OS CS
ASTB
Vss (GND)
A15 A14 A13 A12 A11 A10 A9 A8
AD7 AD6 AD5 AD4 AD3
R120 100
R121 100
C51 100P
K11
R119 100
R122 100
R123 100
IC4
TC74HC373AP
5V Q7 D7 D6 Q6 Q5 D5 D4 Q4 LE
OE Q0 D0 D1 Q1 Q2 D2 D3 Q3 GND
C12 0.01
D0~7
R112 R113 R118 R117 R115 R111 R116
100 100 100 100 100 100 100
IC2
PGD30620C
5V A14 A13 A8 A9 A11 OE A10 CE D7 D6 D5 D4 D3
A15 A12 A7 A6 A5 A4 A3 A2 A1 A0 D0 D1 D2 GND
A0~7
R114 100
C13 0.01
R95 0Ω
C59 100P
C58 100P
C57 100P
C56 100P
C55 100P
C54 100P
C53 100P
C52 100P
K19 K18 K17 K16 K15 K14 K13 K12
47K
47K
47K
47K
R78 47K
5V TEST CLK DATA
NC NC NC GND
C8 0.01
IC3
AT24C01

NOTE: UNLESS OTHERWISE SPECIFIED,
ALL DIODES ARE DA204K
ALL RESISTANCE VALUES ARE IN OHMS. (1/10W)
ALL INDUCTANCE VALUES ARE IN μH.
ALL CAPACITANCE VALUES ARE IN uF.
⫲ ELECTROLYTIC
⊣⊢ CERAMIC

4.36 SYSCON CIRCUIT BOARD

— SOLDER Side —


SYSCON
PRK20214 -01-01 SYSCON PWB
A SYSCON PWB ASS'Y
3 1 PRK20214
1
2
3
4
5
6
A
B
C
IC1
IC2
IC3
IC4
IC5
IC6
IC7
IC8
IC9
CN1
X1
SW1
K1
K2
L1
Q1
D1
D2
D3
D4
D5
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TPGND
1A
1B
32A
32B

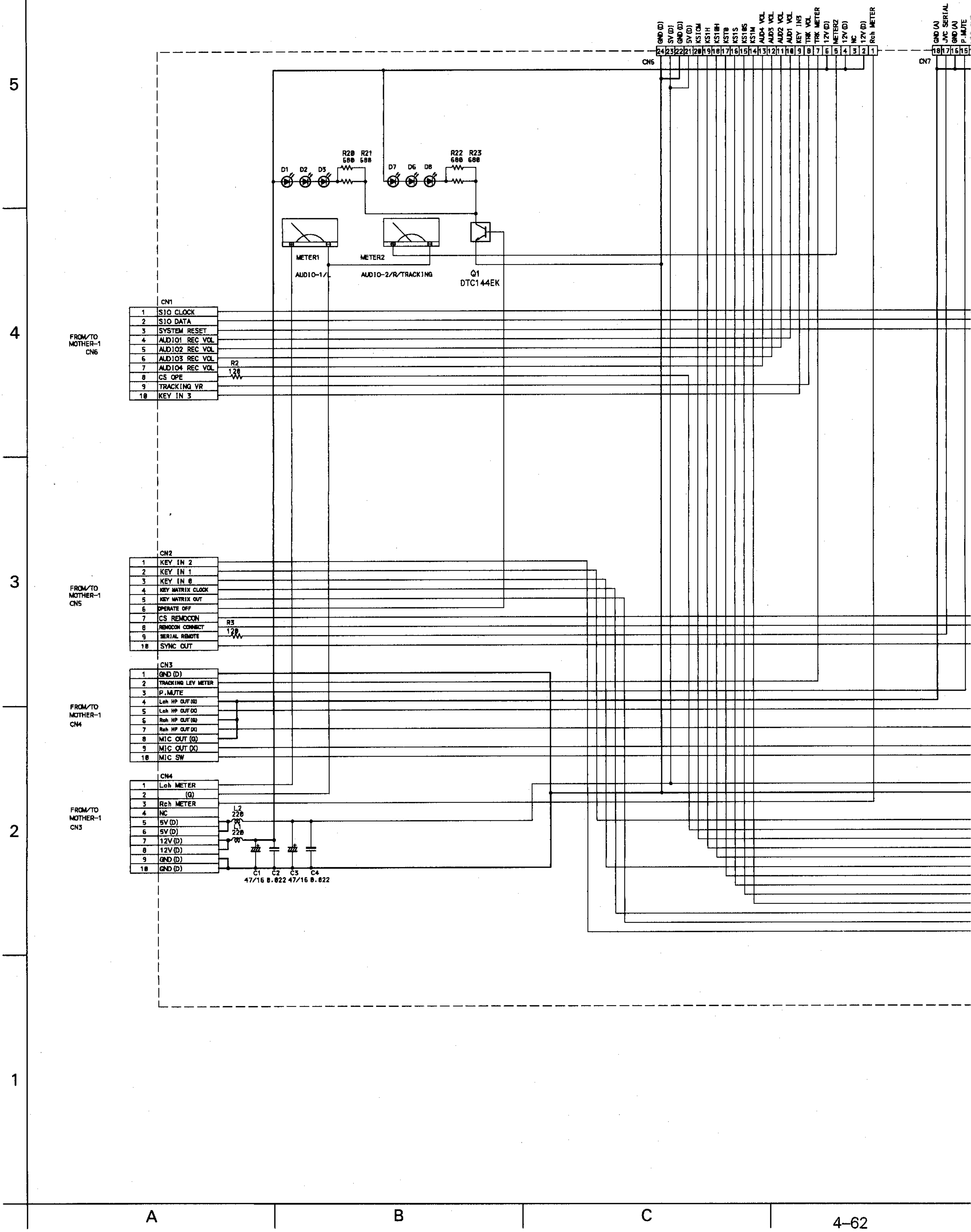


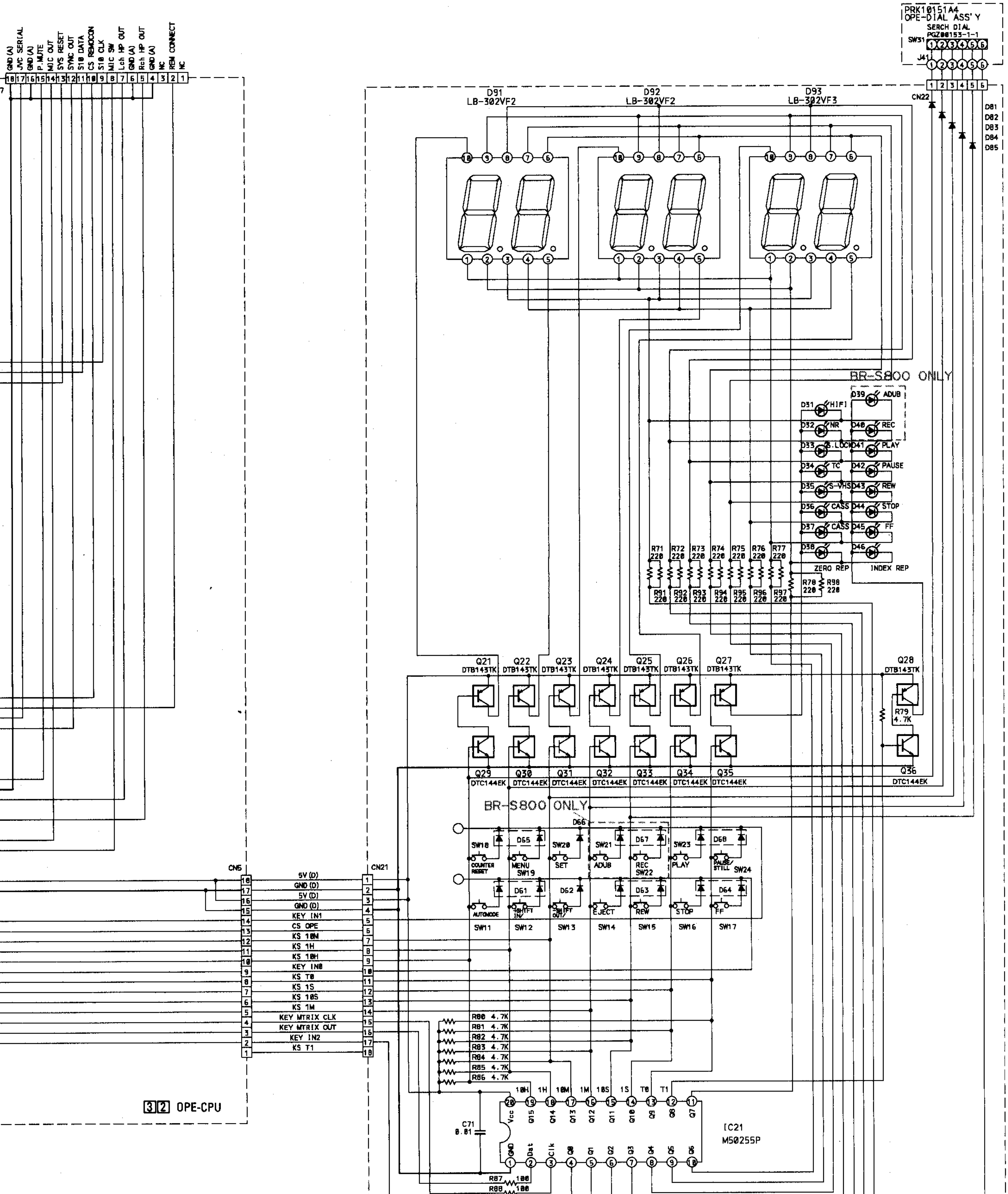
— DC Voltage —

SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC2	1	2.3	2.3
	2	2.2	2.2
	3	2.7	2.7
	4	1.2	1.2
	5	2.7	2.7
	6	2.7	2.7
	7	2.4	2.4
	8	2.8	2.8
	9	2.6	2.6
	10	2.5	2.5
	11	2.1	2.1
	12	2.2	2.2
	13	2.3	2.3
	14	0.0	0.0
	15	2.2	2.2
	16	2.0	2.0
	17	2.5	2.5
	18	1.6	1.6
	19	2.1	2.1
	20	0.0	0.0
	21	1.9	1.9
	22	3.5	3.5
	23	3.5	3.5
	24	2.6	2.6
	25	3.0	3.0
	26	3.4	3.4
	27	3.3	3.3
	28	5.2	5.2
IC3	1	0.1	0.1
	2	0.1	0.1
	3	0.1	0.1
	4	0.0	0.0
	5	0.0	0.0
	6	5.2	5.2
	7	0.0	0.0
	8	5.2	5.2
IC4	1	0.0	0.0
	2	2.5	2.5
	3	2.1	2.1
	4	2.1	2.1
	5	2.6	2.6
	6	2.8	2.8
	7	2.3	2.3
	8	2.2	2.2
	9	2.6	2.6
	10	0.0	0.0
	11	0.4	0.4
	12	2.7	2.7
	13	2.0	2.0
	14	2.5	2.5
	15	2.9	2.9
	16	1.6	1.6
	17	1.6	1.6
	18	2.2	2.2
	19	2.2	2.2
	20	0.0	0.0
IC5	1	5.2	5.2
	2	0.0	0.0
	3	5.2	5.2
	4	2.7	2.7
	5	2.5	2.5
	6	5.2	5.2
	7	0.0	0.0
	8	5.2	5.2
	9	5.2	5.2
	10	0.0	0.0
	11	5.2	5.2
	12	3.2	3.2
	13	2.0	2.0
	14	5.2	5.2
IC6	1	0.0	0.0
	2	5.2	5.2
	3	5.2	5.2
	4	0.0	0.0
	5	5.2	5.2
	6	5.2	5.2
	7	0.0	0.0
	8	5.2	5.2
	9	5.2	5.2
	10	0.0	0.0
	11	0.0	0.0
	12	5.2	5.2
	13	5.2	5.2
	14	5.2	5.2
IC7	1	5.2	5.2
	2	0.0	0.0
	3	5.2	5.2
	4	0.0	0.0
	5	2.4	2.4
	6	2.7	2.7
	7	0.0	0.0
	8	0.0	0.0
	9	5.2	5.2
	10	2.0	2.0
	11	3.2	3.2
	12	0.0	0.0
	13	5.2	5.2
	14	5.2	5.2
IC8	1	5.2	5.2
	2	5.2	5.2
	3	5.2	5.2
	4	5.2	5.2
	5	5.2	5.2
	6	5.2	5.2
	7	0.0	0.0
	8	0.0	0.0
	9	0.0	0.0
	10	0.0	0.0
	11	5.2	5.2
	12	5.2	5.2
	13	0.0	0.0
	14	0.0	0.0
IC9	1	0.0	0.0
	2	—	—
	3	0.0	0.0
	4	0.0	0.0
	5	—	—
	6	5.2	5.2
	7	5.2	5.2
	8	0.0	0.0
TRANSISTOR			
Q1	B	0.0	0.0
	C	5.2	5.2
	E	0.0	0.0
CONNECTOR			
CN1	1A	2.6	2.6
	1B	2.5	2.5
	2A	2.6	2.6
	2B	2.6	2.6
	3A	2.6	2.6
	3B	0.0	0.0
	4A	1.2	1.2
	4B	0.7	0.7
	5A	0.0	0.0
	5B	0.0	0.0
	6A	0.1	0.1
	6B	0.7	0.7
	7A	5.2	5.2
	7B	5.1	5.1
	8A	3.2	3.2
	8B	0.0	0.0
	9A	0.2	0.2
	9B	—	—
	10A	2.4	2.4
	10B	2.4	2.4
	11A	5.1	5.1
	11B	0.0	0.0
	12A	0.0	0.0
	12B	0.0	0.0
	13A	0.0	0.0
	13B	0.0	0.0
	14A	0.0	0.0
	14B	0.0	0.0
	15A	5.1	5.1
	15B	0.0	0.0
	16A	5.1	5.1
	16B	5.2	5.2
	17A	0.0	0.0
	17B	0.0	0.0
	18A	12.9	12.9
	18B	12.9	12.9
	19A	5.2	5.2
	19B	5.2	5.2
	20A	5.2	5.2
	20B	4.1	4.1
	21A	0.0	0.0
	21B	0.0	0.0
	22A	0.0	0.0
	22B	2.4	2.4
	23A	0.0	0.0
	23B	0.0	0.0
	24A	5.2	5.2
	24B	5.3	5.3
	25A	5.0	5.0
	25B	4.2	4.2
	26A	5.2	5.2
	26B	5.2	5.2
	27A	5.1	5.1
	27B	5.2	5.2
	28A	2.4	2.4
	28B	0.0	0.0
	29A	0.0	0.0
	29B	0.0	0.0
	30A	5.2	5.2
	30B	5.2	5.2
	31A	0.6	0.6
	31B	0.0	0.0
	32A	—	—
	32B	4.8	4.8

4.37 OPERATION SCHEMATIC DIAGRAM

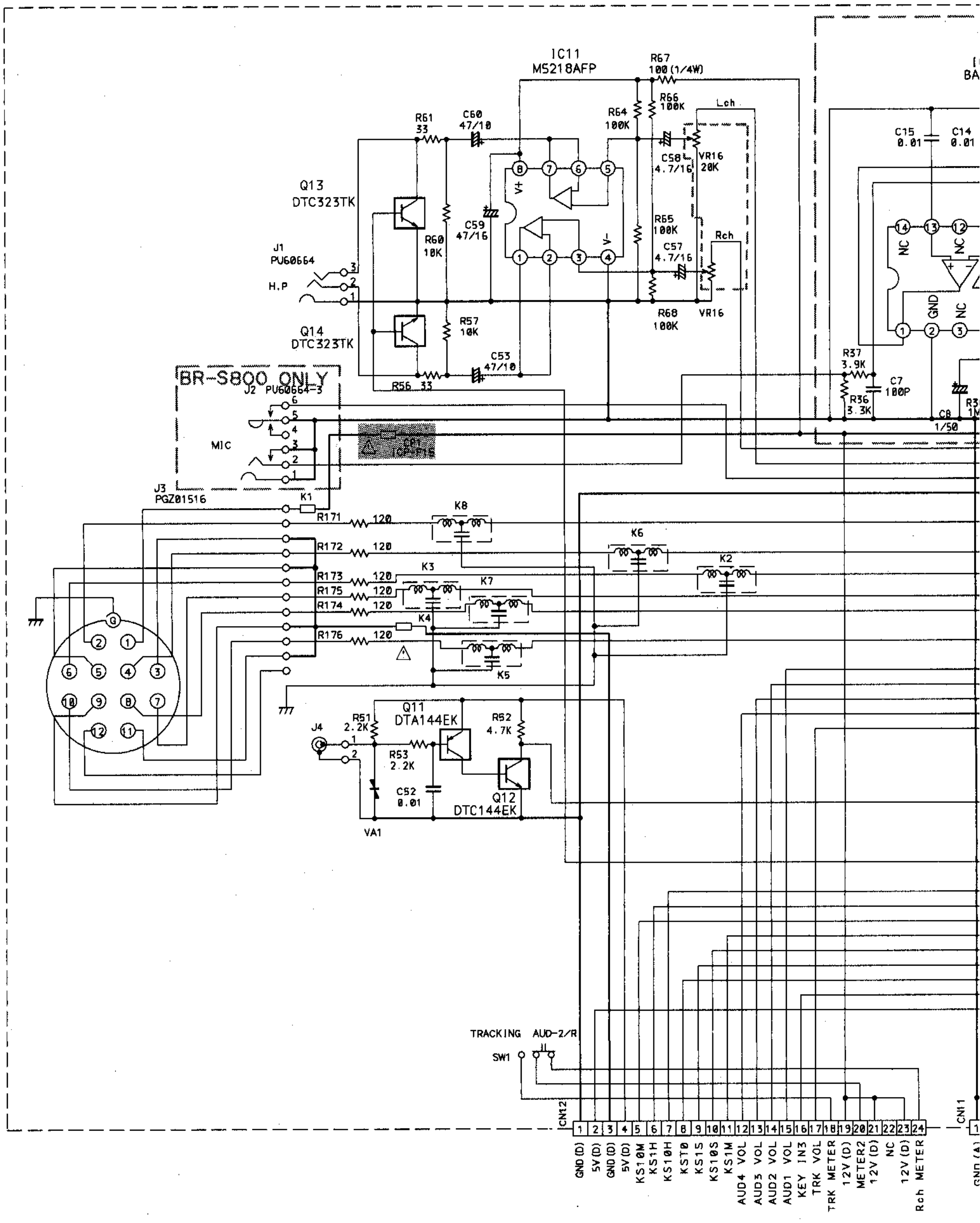
— OPE-CPU, OPE-SW, OPE-DIAL —


6
5
4
3
2
1
A
B
C
CN6
24 GND (D)
23 5V (D)
22 GND (D)
21 5V (D)
20 KSIOM
19 KS1H
18 KS10H
17 KSTB
16 KS1S
15 KS10S
14 KS1M
13 AUD4 VOL
12 AUD3 VOL
11 AUD2 VOL
10 AUD1 VOL
9 KEY IN3
8 TRK VOL
7 TRK METER
6 12V (D)
5 METER2
4 12V (D)
3 NC
2 12V (D)
1 Rch METER
CN7
18 GND (A)
17 JVC SERIAL
16 GND (A)
15 P.MUTE
D1
D2
D3
R20 680
R21 680
D7
D6
D8
R22 680
R23 680
METER1
AUDIO-1/L
METER2
AUDIO-2/R/TRACKING
Q1
DTC144EK
FROM/TO MOTHER-1 CN6
CN1
1 SIO CLOCK
2 SIO DATA
3 SYSTEM RESET
4 AUDIO1 REC VOL
5 AUDIO2 REC VOL
6 AUDIO3 REC VOL
7 AUDIO4 REC VOL
8 CS OPE
9 TRACKING VR
10 KEY IN 3
R2 120
FROM/TO MOTHER-1 CN5
CN2
1 KEY IN 2
2 KEY IN 1
3 KEY IN 0
4 KEY MATRIX CLOCK
5 KEY MATRIX OUT
6 OPERATE OFF
7 CS REMOCON
8 REMOCON CONNECT
9 SERIAL REMOTE
10 SYNC OUT
R3 120
FROM/TO MOTHER-1 CN4
CN3
1 GND (D)
2 TRACKING LEV METER
3 P.MUTE
4 Lch HP OUT (G)
5 Lch HP OUT (X)
6 Rch HP OUT (G)
7 Rch HP OUT (X)
8 MIC OUT (G)
9 MIC OUT (X)
10 MIC SW
FROM/TO MOTHER-1 CN3
CN4
1 Lch METER
2 (G)
3 Rch METER
4 NC
5 5V (D)
6 5V (D)
7 12V (D)
8 12V (D)
9 GND (D)
10 GND (D)
L2 220
L1 220
C1 47/16
C2 0.022
C3 47/16
C4 0.022


GND (A)
JVC SERIAL
GND (A)
P.MUTE
MIC OUT
SYS RESET
SYNC OUT
S10 DATA
CS REMOCON
S10 CLK
MIC SW
Lch HP OUT
GND (A)
Rch HP OUT
GND (A)
NC
REM CONNECT
NC
18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
PRK10151A4
OPE-DIAL ASS'Y
SERCH DIAL
PGZ00153-1-1
SW31
J41
CN22
D91
LB-302VF2
D92
LB-302VF2
D93
LB-302VF3
D81
D82
D83
D84
D85
BR-S800 ONLY
D31 HIFI
D32 NR
D33 S.LOCK
D34 TC
D35 S-VHS
D36 CASS
D37 CASS
D38 ZERO REP
D39 ADUB
D40 REC
D41 PLAY
D42 PAUSE
D43 REW
D44 STOP
D45 FF
D46 INDEX REP
R71 220
R72 220
R73 220
R74 220
R75 220
R76 220
R77 220
R78 220
R90 220
R91 220
R92 220
R93 220
R94 220
R95 220
R96 220
R97 220
Q21 DTB143TK
Q22 DTB143TK
Q23 DTB143TK
Q24 DTB143TK
Q25 DTB143TK
Q26 DTB143TK
Q27 DTB143TK
Q28 DTB143TK
R79 4.7K
Q29 DTC144EK
Q30 DTC144EK
Q31 DTC144EK
Q32 DTC144EK
Q33 DTC144EK
Q34 DTC144EK
Q35 DTC144EK
Q36 DTC144EK
BR-S800 ONLY
D65
D66
D67
D68
SW18 COUNTER RESET
MENU SW19
SW20 SET
SW21 ADUB
REC SW22
SW23 PLAY
PAUSE/STILL SW24
D61
D62
D63
D64
SW11 AUTOMODE
SW12 SHIFT IN
SW13 SHIFT OUT
SW14 EJECT
SW15 REW
SW16 STOP
SW17 FF
CN5
CN21
5V (D)
GND (D)
5V (D)
GND (D)
KEY IN1
CS OPE
KS 10M
KS 1H
KS 10H
KEY IN0
KS T0
KS 1S
KS 10S
KS 1M
KEY MTRIX CLK
KEY MTRIX OUT
KEY IN2
KS T1
R80 4.7K
R81 4.7K
R82 4.7K
R83 4.7K
R84 4.7K
R85 4.7K
R86 4.7K
10H 1H 10M 1M 10S 1S T0 T1
Vcc Q15 Q14 Q13 Q12 Q11 Q10 Q9 Q8 Q7
GND Dat Clk Q0 Q1 Q2 Q3 Q4 Q5 Q6
IC21
M50255P
C71
0.01
R87 100
R88 100
3 2 OPE-CPU
3 4 OPE-SW

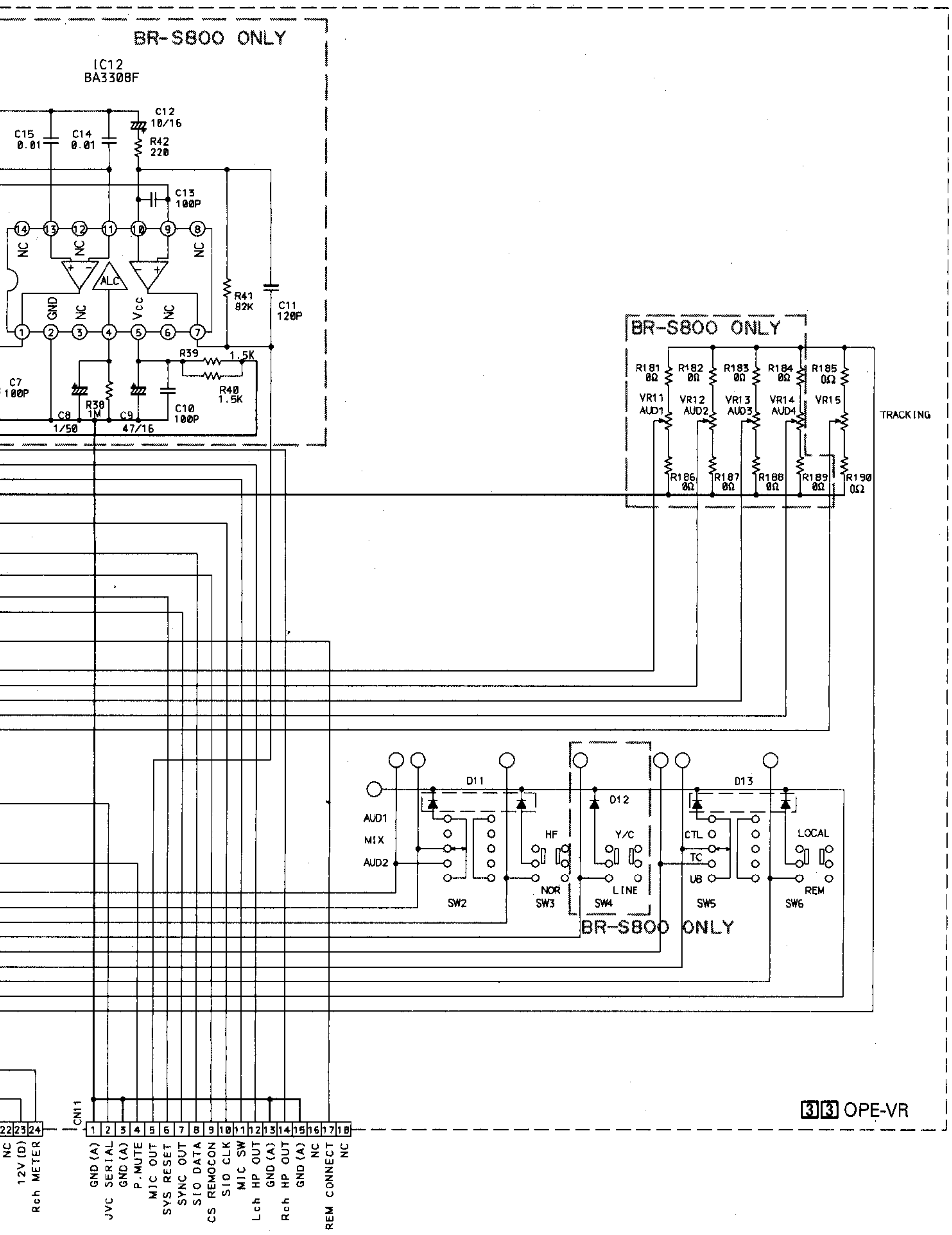
NOTE:UNLESS OTHERWISE SPECIFIED;
ALL DIODES ARE DA204K
ALL RESISTANCE VALUES ARE IN OHMS.(1/10W)
ALL INDUCTANCE VALUES ARE IN μH.
ALL CAPACITANCE VALUES ARE IN uF.

— OPE-VR —


IC11
MS218AFP
R67
100(1/4W)
R66
100K
R64
100K
Lch
R61
33
C60
47/10
C58
4.7/16
VR16
20K
V+
V-
Q13
DTC323TK
C59
47/16
R60
10K
R65
100K
C57
4.7/16
Rch
J1
PU60664
H.P
R68
100K
VR16
Q14
DTC323TK
R57
10K
C53
47/10
R56 33
BR-S800 ONLY
J2 PU60664-3
MIC
CP1
ICP-F15
J3
PGZ01516
K1
R171 120
K8
R172 120
K6
K2
R173 120
R175 120
R174 120
R176 120
K3
K7
K4
K5
G
Q11
DTA144EK
R51
2.2K
R52
4.7K
J4
R53
2.2K
C52
0.01
Q12
DTC144EK
VA1
BA
C15
0.01
C14
0.01
NC
GND
R37
3.9K
R36
3.3K
C7
100P
C8
1/50
TRACKING
AUD-2/R
SW1
CN12
GND(D)
5V(D)
GND(D)
5V(D)
KS10M
KS1H
KS10H
KST0
KS1S
KS10S
KS1M
AUD4 VOL
AUD3 VOL
AUD2 VOL
AUD1 VOL
KEY IN3
TRK VOL
TRK METER
12V(D)
METER2
12V(D)
NC
12V(D)
Rch METER
CN11
GND(A)

6
5
4
3
2
1

A
B
C

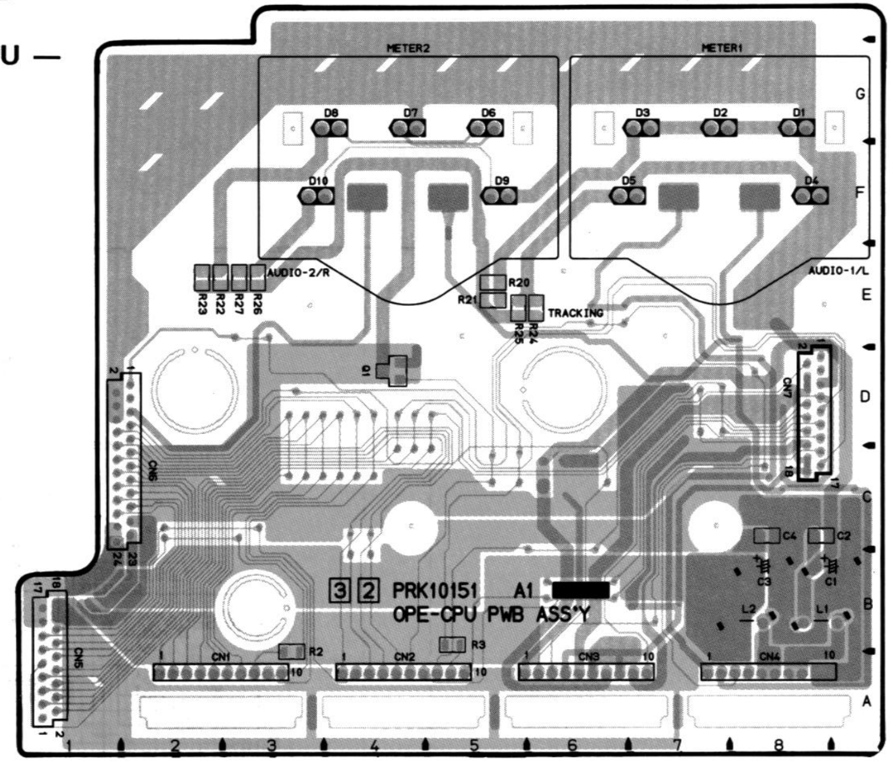

BR-S800 ONLY
IC12
BA3308F
C15
0.01
C14
0.01
C12
10/16
R42
220
C13
100P
NC
NC
NC
ALC
GND
NC
Vcc
NC
R41
82K
C11
120P
C7
100P
R39
1.5K
R40
1.5K
R38
1M
C8
1/50
C9
47/16
C10
100P
BR-S800 ONLY
R181 0Ω
R182 0Ω
R183 0Ω
R184 0Ω
R185 0Ω
VR11 AUD1
VR12 AUD2
VR13 AUD3
VR14 AUD4
VR15
TRACKING
R186 0Ω
R187 0Ω
R188 0Ω
R189 0Ω
R190 0Ω
D11
D12
D13
AUD1
MIX
AUD2
SW2
HF
NOR
SW3
Y/C
LINE
SW4
BR-S800 ONLY
CTL
TC
UB
SW5
LOCAL
REM
SW6
33 OPE-VR
CN11
22 23 24
NC
12V (D)
Rch METER
1 GND (A)
2 JVC SERIAL
3 GND (A)
4 P.MUTE
5 MIC OUT
6 SYS RESET
7 SYNC OUT
8 SIO DATA
9 CS REMOCON
10 SIO CLK
11 MIC SW
12 Lch HP OUT
13 GND (A)
14 Rch HP OUT
15 GND (A)
16 NC
17 REM CONNECT
18 NC

— DC Voltage —

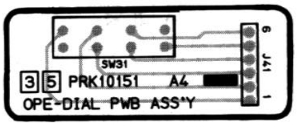
SYMBOL	No.	REC	PB
INTEGRATED CIRCUIT			
IC11	1	6.3	6.3
	2	6.3	6.3
	3	6.2	6.3
	4	0.0	0.0
	5	6.2	6.2
	6	6.2	6.3
	7	6.2	6.3
	8	12.5	12.5
IC12	1	1.5	1.5
	2	0.0	0.0
	3	0.0	0.0
	4	0.0	0.0
	5	9.2	9.3
	6	0.0	0.0
	7	1.9	1.8
	8	0.0	0.0
	9	0.0	0.0
	10	1.8	1.8
	11	1.5	1.5
	12	0.0	0.0
	13	0.0	0.0
	14	0.0	0.0
IC21	1	0.0	0.0
	2	0.1	0.1
	3	0.7	0.7
	4	—	—
	5	—	—
	6	—	—
	7	—	—
	8	—	—
	9	—	—
	10	—	—
	11	2.2	2.5
	12	0.6	0.6
	13	0.5	0.5
	14	0.5	0.5
	15	0.5	0.5
	16	0.5	0.5
	17	0.5	0.5
	18	0.5	0.5
	19	0.5	0.5
	20	5.1	5.2
TRANSISTOR			
Q1	B	.	.
	C	.	.
	E	.	.
Q11	B	5.1	5.2
	C	0.0	0.0
	E	5.2	5.2
Q12	B	0.0	0.0
	C	5.1	5.2
	E	0.0	0.0
Q13	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q14	B	0.0	0.0
	C	0.0	0.0
	E	0.0	0.0
Q21	B	4.1	4.1
	C	3.5	3.6
	E	5.1	5.2
Q22	B	4.1	4.1
	C	3.8	3.5
	E	5.2	5.2
Q23	B	4.1	4.1
	C	3.7	3.0
	E	5.2	5.2
Q24	B	4.1	4.1
	C	3.5	3.3
	E	5.2	5.2
Q25	B	4.1	4.1
	C	3.3	3.3
	E	5.2	5.2
Q26	B	4.1	4.1
	C	3.1	3.1
	E	5.2	5.2
Q27	B	4.1	4.1
	C	3.6	3.2
	E	5.2	5.2
Q28	B	4.1	4.1
	C	3.4	3.0
	E	5.2	5.2
Q29	B	0.5	0.5
	C	4.1	4.1
	E	0.0	0.0
Q30	B	0.5	0.5
	C	4.1	4.1
	E	0.0	0.0
Q31	B	0.4	0.5
	C	4.1	4.1
	E	0.0	0.0
Q32	B	0.5	0.5
	C	4.1	4.1
	E	0.0	0.0
Q33	B	0.5	0.5
	C	4.1	4.1
	E	0.0	0.0
Q34	B	0.5	0.5
	C	4.1	4.1
	E	0.0	0.0
Q35	B	0.5	0.5
	C	4.1	4.1
	E	0.0	0.0
Q36	B	0.6	0.6
	C	4.1	4.1
	E	0.0	0.0
CONNECTOR			
CN1	1	5.0	5.0
	2	4.3	4.1
	3	5.2	5.2
	4	2.3	2.3
	5	2.6	2.6
	6	2.3	2.3
	7	1.3	1.3
	8	0.0	0.0
	9	3.7	3.5
	10	1.2	1.2
CN2	1	0.8	1.2
	2	0.0	0.0
	3	0.0	0.0
	4	0.7	0.7
	5	0.1	0.1
	6	5.1	5.1
	7	5.2	5.2
	8	5.2	5.2
	9	5.2	0.0
	10	2.4	2.5
CN3	1	0.0	0.0
	2	0.0	0.9
	3	0.0	0.0
	4	0.0	0.0
	5	0.0	0.0
	6	0.0	0.0
	7	0.0	0.0
	8	0.0	0.0
	9	1.9	1.8
	10	11.3	11.3
CN4	1	0.0	0.0
	2	0.0	0.0
	3	0.0	0.0
	4	5.3	5.3
	5	5.2	5.2
	6	5.2	5.2
	7	12.9	12.9
	8	12.9	12.9
	9	0.0	0.0
	10	0.0	0.0
CN5	1	0.0	0.0
	2	0.8	1.1
	3	0.1	0.1
	4	0.7	0.8
	5	0.5	0.5
	6	0.5	0.5
	7	0.5	0.5
	8	0.0	0.0
	9	0.5	0.0
	10	0.5	0.5
	11	0.5	0.5
	12	0.5	0.5
	13	0.0	0.0
	14	0.0	0.0
	15	0.0	0.0
	16	5.1	5.2
	17	0.0	0.0
	18	5.2	5.2
IC6	1	0.0	0.0
	2	12.8	12.9
	3	0.0	0.0
	4	12.8	12.9
	5	0.0	0.0
	6	12.8	12.9
	7	0.0	0.8
	8	3.5	3.5
	9	1.2	1.2
	10	2.3	2.3
	11	2.6	2.6
	12	2.3	2.3
	13	1.3	1.3
	14	0.5	0.5
	15	0.5	0.5
	16	0.5	0.5
	17	0.5	0.5
	18	0.5	0.5
	19	0.5	0.5
	20	0.5	0.5
	21	5.2	5.2
	22	0.0	0.0
	23	5.2	5.2
	24	0.0	0.0
CN7	1	0.0	0.0
	2	5.2	5.2
	3	0.0	0.0
	4	0.0	0.0
	5	0.0	0.0
	6	0.0	0.0
	7	0.0	0.0
	8	11.3	11.3
	9	5.0	5.0
	10	5.2	5.2
	11	4.2	4.2
	12	2.4	2.5
	13	5.2	5.2
	14	1.8	1.8
	15	0.0	0.0
	16	0.0	0.0
	17	5.1	5.2
	18	0.0	0.0
IC11	1	0.0	0.0
	2	5.1	5.2
	3	0.0	0.0
	4	0.0	0.0
	5	1.8	1.8
	6	5.2	5.2
	7	2.4	2.5
	8	4.2	4.2
	9	5.2	5.2
	10	5.0	5.0
	11	11.3	11.3
	12	0.0	0.0
	13	0.0	0.0
	14	0.0	0.0
	15	0.0	0.0
	16	0.0	0.0
	17	5.2	5.2
	18	0.0	0.0
CN12	1	0.0	0.0
	2	5.2	5.2
	3	0.0	0.0
	4	5.2	5.2
	5	0.5	0.5
	6	0.5	0.5
	7	0.5	0.5
	8	0.5	0.5
	9	0.5	0.5
	10	0.5	0.5
	11	0.5	0.5
	12	1.3	1.3
	13	2.3	2.3
	14	2.6	2.6
	15	2.3	2.3
	16	1.2	1.2
	17	3.5	3.5
	18	0.0	0.8
	19	12.8	12.9
	20	0.0	0.0
	21	12.8	12.9
	22	0.0	0.0
	23	12.8	12.9
	24	0.0	0.0
CN21	1	5.2	5.2
	2	0.0	0.0
	3	5.1	5.2
	4	0.0	0.0
	5	0.0	0.0
	6	0.0	0.0
	7	0.5	0.5
	8	0.5	0.5
	9	0.5	0.5
	10	0.0	0.0
	11	0.5	0.5
	12	0.5	0.5
	13	0.5	0.5
	14	0.5	0.5
	15	0.7	0.8
	16	0.1	0.1
	17	0.8	1.1
	18	0.0	0.0
CN22	1	0.8	1.1
	2	1.8	1.1
	3	0.8	1.8
	4	1.8	2.2
	5	2.0	1.2
	6	0.8	1.1

4.38 OPERATION CIRCUIT BOARD

— OPE-CPU —

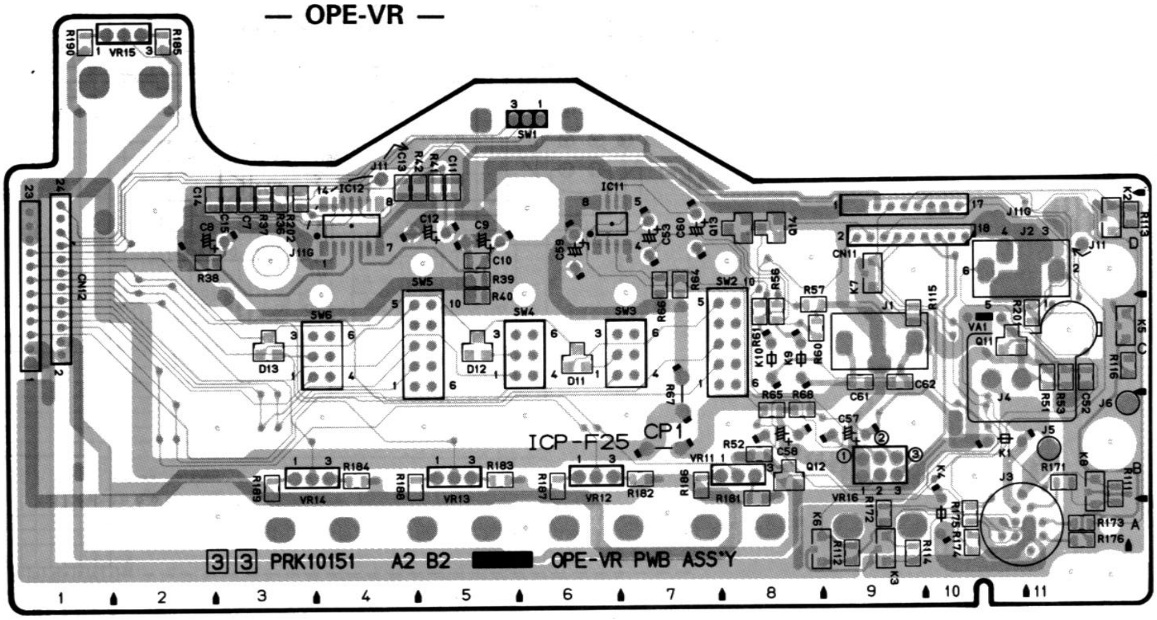

METER2
METER1
AUDIO-2/R
AUDIO-1/L
TRACKING
3 2 PRK10151 A1
OPE-CPU PWB ASS'Y
CN1
CN2
CN3
CN4
CN5
CN6
CN7

— OPE-DIAL —

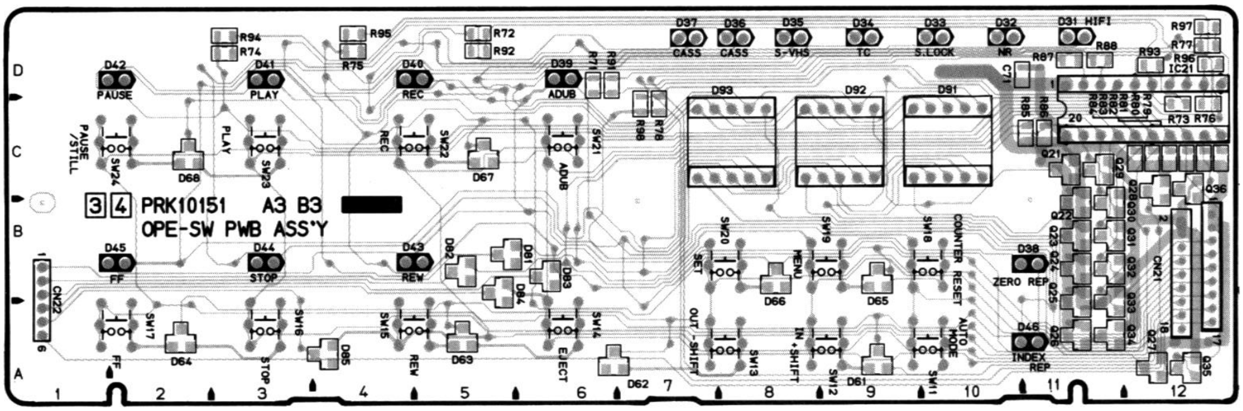

SW31
J41
3 5 PRK10151 A4
OPE-DIAL PWB ASS'Y

PRK10151 -01-04 OPERATION PWB
PRK10151 A B ■ OPERATION PWB ASS'Y

— OPE-VR —

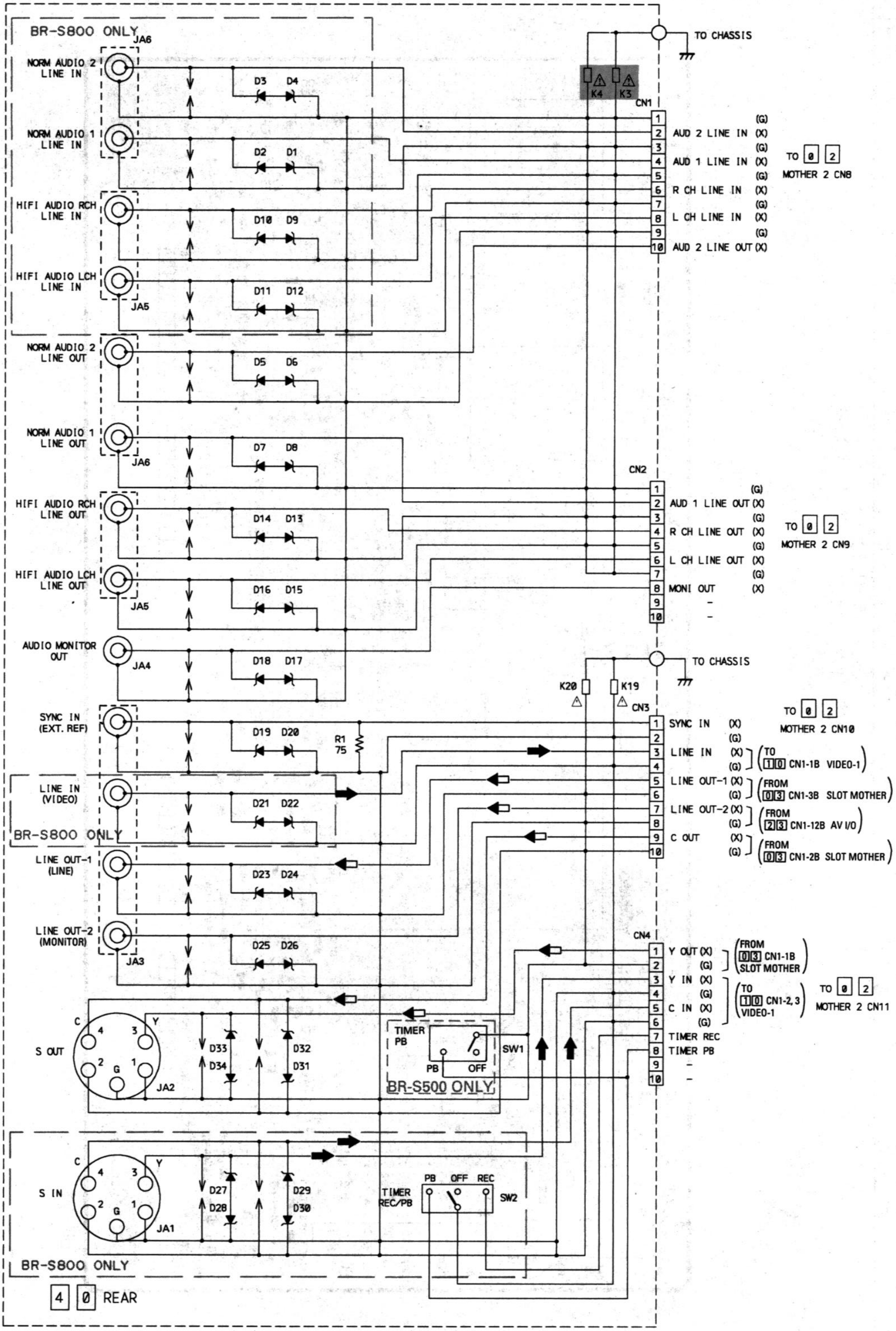

3 3 PRK10151 A2 B2
OPE-VR PWB ASS'Y
ICP-F25
CP1
CN12
CN11

— OPE-SW —


3 4 PRK10151 A3 B3
OPE-SW PWB ASS'Y
PAUSE
PLAY
REC
ADUB
FF
STOP
REW
EJECT
CASS
CASS
S-VHS
TC
S.LOCK
NR
HIFI
ZERO REP
INDEX REP
SET
MENU
COUNTER RESET
AUTO MODE
OUT-SHIFT
IN+SHIFT
PAUSE /STILL
CN21
CN22

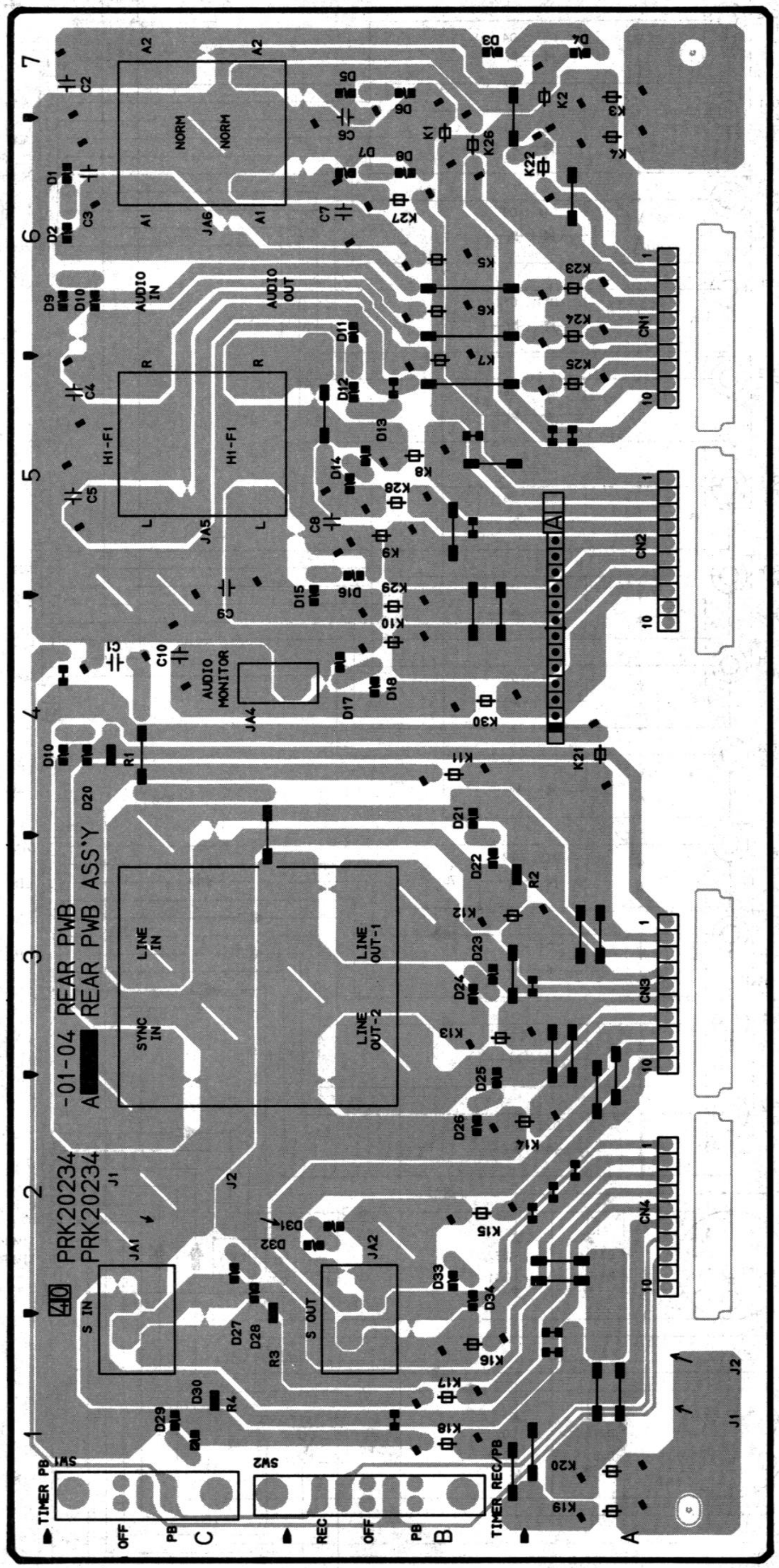
4.39 REAR SCHEMATIC DIAGRAM

NOTE: UNLESS OTHERWISE SPECIFIED;
ALL ZENER DIODES ARE RD10ES-T1B1
ALL RESISTANCE VALUES ARE IN OHMS. (1/8W)

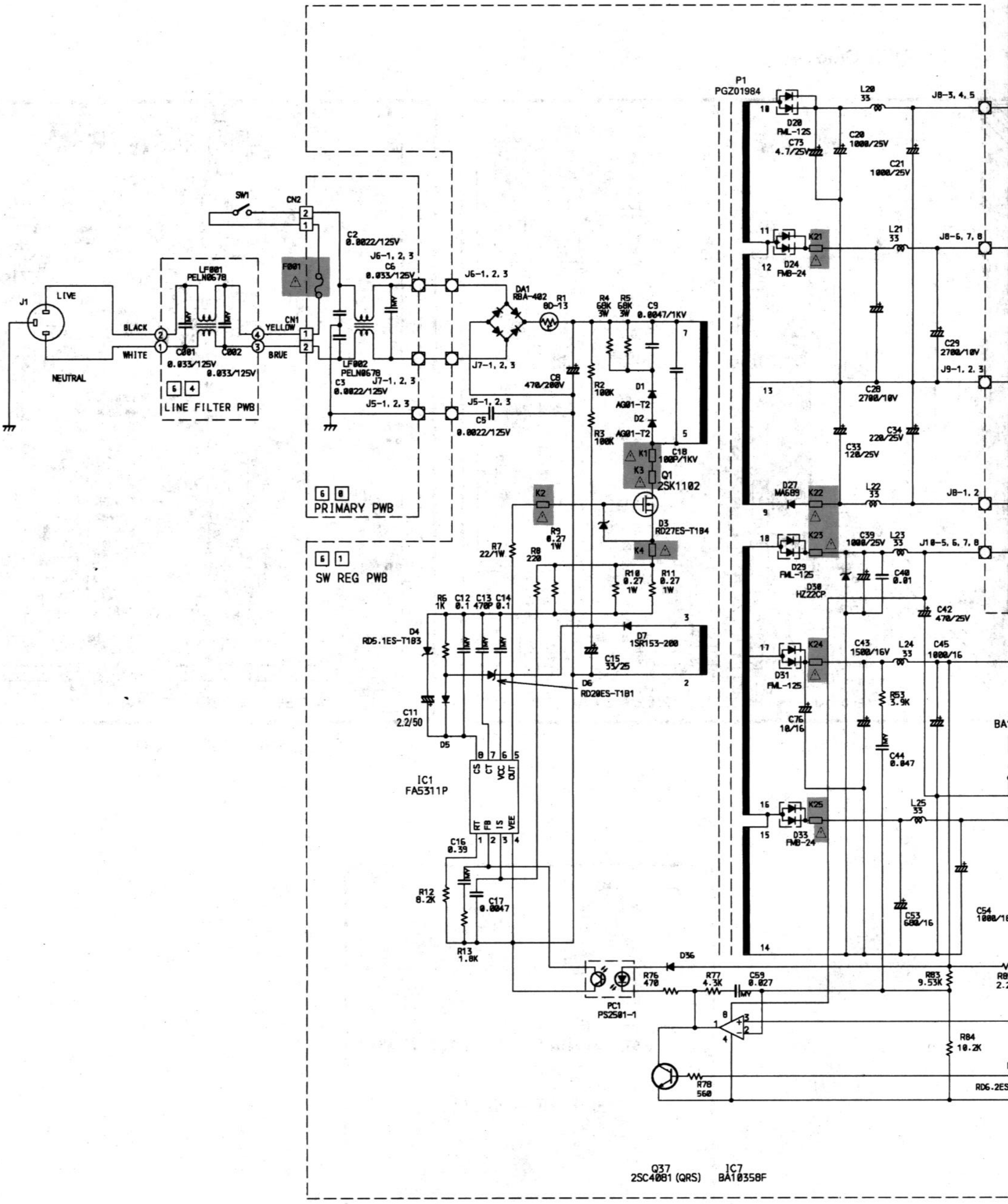


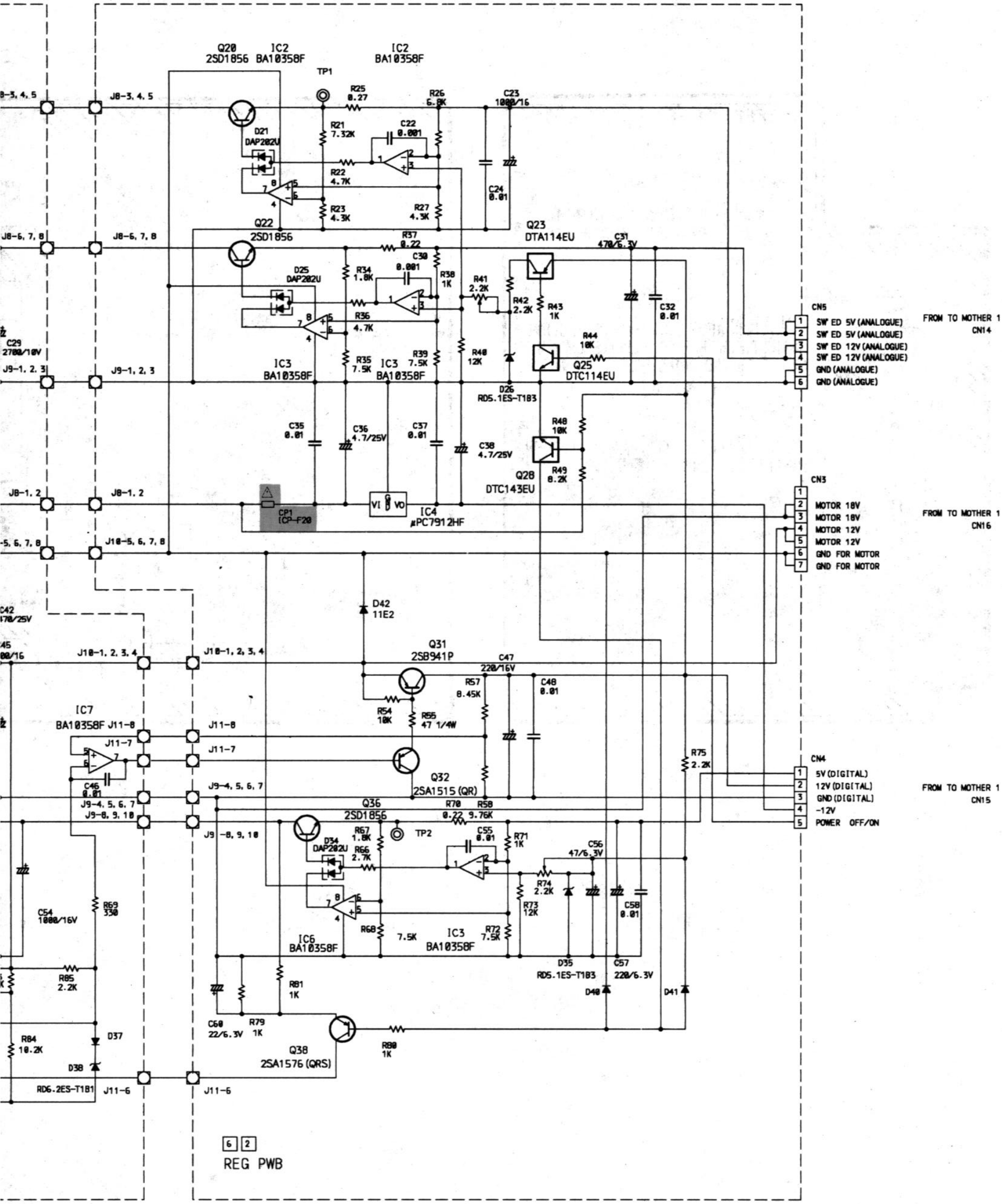
BR-S800 ONLY
JA6
NORM AUDIO 2 LINE IN
D3 D4
NORM AUDIO 1 LINE IN
D2 D1
HIFI AUDIO RCH LINE IN
D10 D9
HIFI AUDIO LCH LINE IN
D11 D12
JA5
NORM AUDIO 2 LINE OUT
D5 D6
NORM AUDIO 1 LINE OUT
D7 D8
JA6
HIFI AUDIO RCH LINE OUT
D14 D13
HIFI AUDIO LCH LINE OUT
D16 D15
JA5
AUDIO MONITOR OUT
JA4
D18 D17
SYNC IN (EXT. REF)
D19 D20
R1 75
LINE IN (VIDEO)
D21 D22
BR-S800 ONLY
LINE OUT-1 (LINE)
D23 D24
LINE OUT-2 (MONITOR)
D25 D26
JA3
S OUT
C 4 3 Y
2 G 1
JA2
D33 D34
D32 D31
TIMER PB
PB OFF
SW1
BR-S500 ONLY
S IN
C 4 3 Y
2 G 1
JA1
D27 D28
D29 D30
TIMER REC/PB
PB OFF REC
SW2
BR-S800 ONLY
4 0 REAR
TO CHASSIS
K4 K3
CN1
1 (G)
2 AUD 2 LINE IN (X)
3 (G)
4 AUD 1 LINE IN (X)
5 (G)
6 R CH LINE IN (X)
7 (G)
8 L CH LINE IN (X)
9 (G)
10 AUD 2 LINE OUT (X)
TO 0 2 MOTHER 2 CN8
CN2
1 (G)
2 AUD 1 LINE OUT (X)
3 (G)
4 R CH LINE OUT (X)
5 (G)
6 L CH LINE OUT (X)
7 (G)
8 MONI OUT (X)
9 -
10 -
TO 0 2 MOTHER 2 CN9
TO CHASSIS
K20 K19
CN3
1 SYNC IN (X)
2 (G)
3 LINE IN (X)
4 (G)
5 LINE OUT-1 (X)
6 (G)
7 LINE OUT-2 (X)
8 (G)
9 C OUT (X)
10 (G)
TO 0 2 MOTHER 2 CN10
(TO 1 0 CN1-1B VIDEO-1)
(FROM 0 3 CN1-3B SLOT MOTHER)
(FROM 2 3 CN1-12B AV I/O)
(FROM 0 3 CN1-2B SLOT MOTHER)
CN4
1 Y OUT (X)
2 (G)
3 Y IN (X)
4 (G)
5 C IN (X)
6 (G)
7 TIMER REC
8 TIMER PB
9 -
10 -
(FROM 0 3 CN1-1B SLOT MOTHER)
(TO 1 0 CN1-2, 3 VIDEO-1)
TO 0 2 MOTHER 2 CN11

4.40 REAR CIRCUIT BOARD


PRK20234 REAR PWB ASS'Y
PRK20234 REAR PWB
A-01-04
40
NORM
HI-FI
R
L
A1
A2
AUDIO IN
AUDIO OUT
AUDIO MONITOR
LINE IN
LINE OUT-1
LINE OUT-2
SYNC IN
S IN
S OUT
JA1
JA2
JA4
JA5
JA6
J1
J2
CN1
CN2
CN3
CN4
SW1
SW2
TIMER PB
OFF
PB
REC
TIMER REC/PB
A
B
C
R1
R2
R3
R4
C2
C3
C4
C5
C6
C7
C8
C9
C10
D1
D2
D3
D4
D5
D6
D7
D8
D9
D10
D11
D12
D13
D14
D15
D16
D17
D18
D20
D21
D22
D23
D24
D25
D26
D27
D28
D29
D30
D31
D32
D33
D34
K1
K2
K3
K4
K5
K6
K7
K8
K9
K10
K11
K12
K13
K14
K15
K16
K17
K18
K19
K20
K21
K22
K23
K24
K25
K26
K27
K28
K29
K30
1
10
1
2
3
4
5
6
7
6
5
4
3
2
1
A
B
C

4.41 SWITCHING REGULATOR SCHEMATIC DIAGRAM

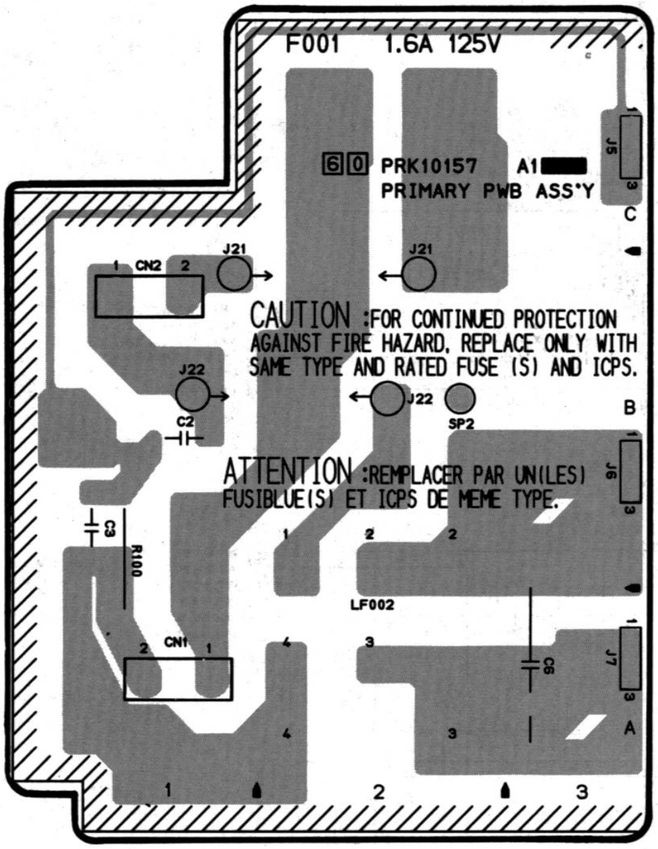

J1
LIVE
NEUTRAL
BLACK
WHITE
LF001
PELN0678
C001
0.033/125V
C002
0.033/125V
6 4
LINE FILTER PWB
YELLOW
BRUE
CN1
CN2
SW1
F001
C2
0.0022/125V
J6-1, 2, 3
C6
0.033/125V
LF002
PELN0678
C3
0.0022/125V
J7-1, 2, 3
J5-1, 2, 3
6 0
PRIMARY PWB
6 1
SW REG PWB
DA1
RBA-402
R1
8D-13
C8
470/200V
C5
0.0022/125V
R4
68K
3W
R5
68K
3W
C9
0.0047/1KV
R2
100K
R3
100K
D1
AG01-T2
D2
AG01-T2
K1
K3
C18
100P/1KV
Q1
2SK1102
D3
RD27ES-T1B4
K2
K4
R9
0.27
1W
R7
22/1W
R8
220
R10
0.27
1W
R11
0.27
1W
D7
1SR153-200
C15
33/25
D6
RD20ES-T1B1
R6
1K
C12
0.1
C13
470P
C14
0.1
D4
RD5.1ES-T1B3
C11
2.2/50
D5
IC1
FA5311P
CS
CT
VCC
OUT
RT
FB
IS
VEE
C16
0.39
R12
8.2K
C17
0.0047
R13
1.8K
PC1
PS2501-1
D36
R76
470
R77
4.3K
C59
0.027
R78
560
Q37
2SC4081 (QRS)
IC7
BA10358F
P1
PGZ01984
D20
FML-12S
C73
4.7/25V
C20
1000/25V
C21
1000/25V
L20
33
J8-3, 4, 5
K21
D24
FMB-24
L21
33
J8-6, 7, 8
C29
2700/10V
C28
2700/10V
J9-1, 2, 3
C34
220/25V
C33
120/25V
D27
MA689
K22
L22
33
J8-1, 2
K23
D29
FML-12S
C39
1000/25V
L23
33
J10-5, 6, 7, 8
C40
0.01
D30
HZ22CP
C42
470/25V
K24
D31
FML-12S
C43
1500/16V
L24
33
C45
1000/16
R53
3.9K
C76
10/16
C44
0.047
K25
D33
FMB-24
L25
33
C53
680/16
C54
R83
9.53K
R84
10.2K
RD6.2ES


J8-3, 4, 5
J8-3, 4, 5
Q20
2SD1856
IC2
BA10358F
IC2
BA10358F
TP1
R25
0.27
R26
6.8K
C23
1000/16
D21
DAP202U
R21
7.32K
C22
0.001
R22
4.7K
C24
0.01
R23
4.3K
R27
4.3K
J8-6, 7, 8
J8-6, 7, 8
Q22
2SD1856
R37
0.22
Q23
DTA114EU
C31
470/6.3V
D25
DAP202U
R34
1.8K
C30
0.001
R38
1K
R41
2.2K
R42
2.2K
R43
1K
C32
0.01
R36
4.7K
R44
10K
C29
2700/10V
J9-1, 2, 3
J9-1, 2, 3
IC3
BA10358F
R35
7.5K
IC3
BA10358F
R39
7.5K
R40
12K
D26
RD5.1ES-T1B3
Q25
DTC114EU
CN5
1 SW ED 5V (ANALOGUE)
2 SW ED 5V (ANALOGUE)
3 SW ED 12V (ANALOGUE)
4 SW ED 12V (ANALOGUE)
5 GND (ANALOGUE)
6 GND (ANALOGUE)
FROM TO MOTHER 1
CN14
C35
0.01
C36
4.7/25V
C37
0.01
C38
4.7/25V
R48
10K
Q28
DTC143EU
R49
8.2K
J8-1, 2
J8-1, 2
CP1
ICP-F20
VI G D VO
IC4
μPC7912HF
CN3
1
2 MOTOR 18V
3 MOTOR 18V
4 MOTOR 12V
5 MOTOR 12V
6 GND FOR MOTOR
7 GND FOR MOTOR
FROM TO MOTHER 1
CN16
J10-5, 6, 7, 8
J10-5, 6, 7, 8
D42
11E2
C42
470/25V
C45
1000/16
J10-1, 2, 3, 4
J10-1, 2, 3, 4
Q31
2SB941P
C47
220/16V
R57
0.45K
C48
0.01
R54
10K
R55
47 1/4W
IC7
BA10358F
J11-8
J11-8
J11-7
J11-7
Q32
2SA1515 (QR)
R75
2.2K
C46
0.01
J9-4, 5, 6, 7
J9-4, 5, 6, 7
J9-8, 9, 10
J9-8, 9, 10
Q36
2SD1856
R70
0.22
R58
9.76K
CN4
1 5V (DIGITAL)
2 12V (DIGITAL)
3 GND (DIGITAL)
4 -12V
5 POWER OFF/ON
FROM TO MOTHER 1
CN15
TP2
R67
1.8K
C55
0.01
R71
1K
D34
DAP202U
R66
2.7K
C56
47/6.3V
R74
2.2K
R73
12K
C58
0.01
R69
330
C54
1000/16V
R68
7.5K
IC6
BA10358F
IC3
BA10358F
R72
7.5K
D35
RD5.1ES-T1B3
C57
220/6.3V
D40
D41
R85
2.2K
R81
1K
C60
22/6.3V
R79
1K
Q38
2SA1576 (QRS)
R80
1K
R84
10.2K
D37
D38
RD6.2ES-T1B1
J11-6
J11-6
6 2
REG PWB

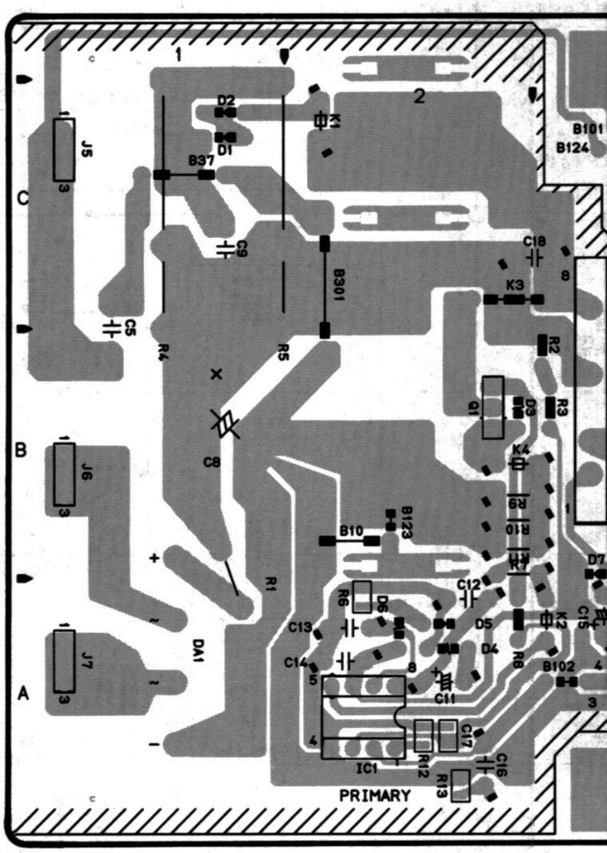
6

4.42 SWITCHING REGULATOR CIRCUIT BOARD
— PRIMARY, SW REGULATOR, REGULATOR, LINE FILTER —

5


F001 1.6A 125V
60 PRK10157 A1
PRIMARY PWB ASS'Y
CAUTION :FOR CONTINUED PROTECTION AGAINST FIRE HAZARD, REPLACE ONLY WITH SAME TYPE AND RATED FUSE (S) AND ICPS.
ATTENTION :REMPLACER PAR UN(LES) FUSIBLUE(S) ET ICPS DE MEME TYPE.
J21
J21
CN2
1
2
J22
J22
SP2
C2
C3
R100
CN1
2
1
LF002
C6
J5
J6
J7
C
B
A
1
2
3
4

— S


1
2
C
B
A
J5
J6
J7
D2
D1
K1
B37
C9
B301
C5
R4
R5
C8
DA1
R1
B10
B123
C18
K3
R2
Q1
D3
R3
K4
R9
R10
R11
C12
R6
D6
C13
D5
D4
R8
K2
C15
C14
C11
B102
C17
R12
R13
C16
IC1
PRIMARY
B101
B124
D7

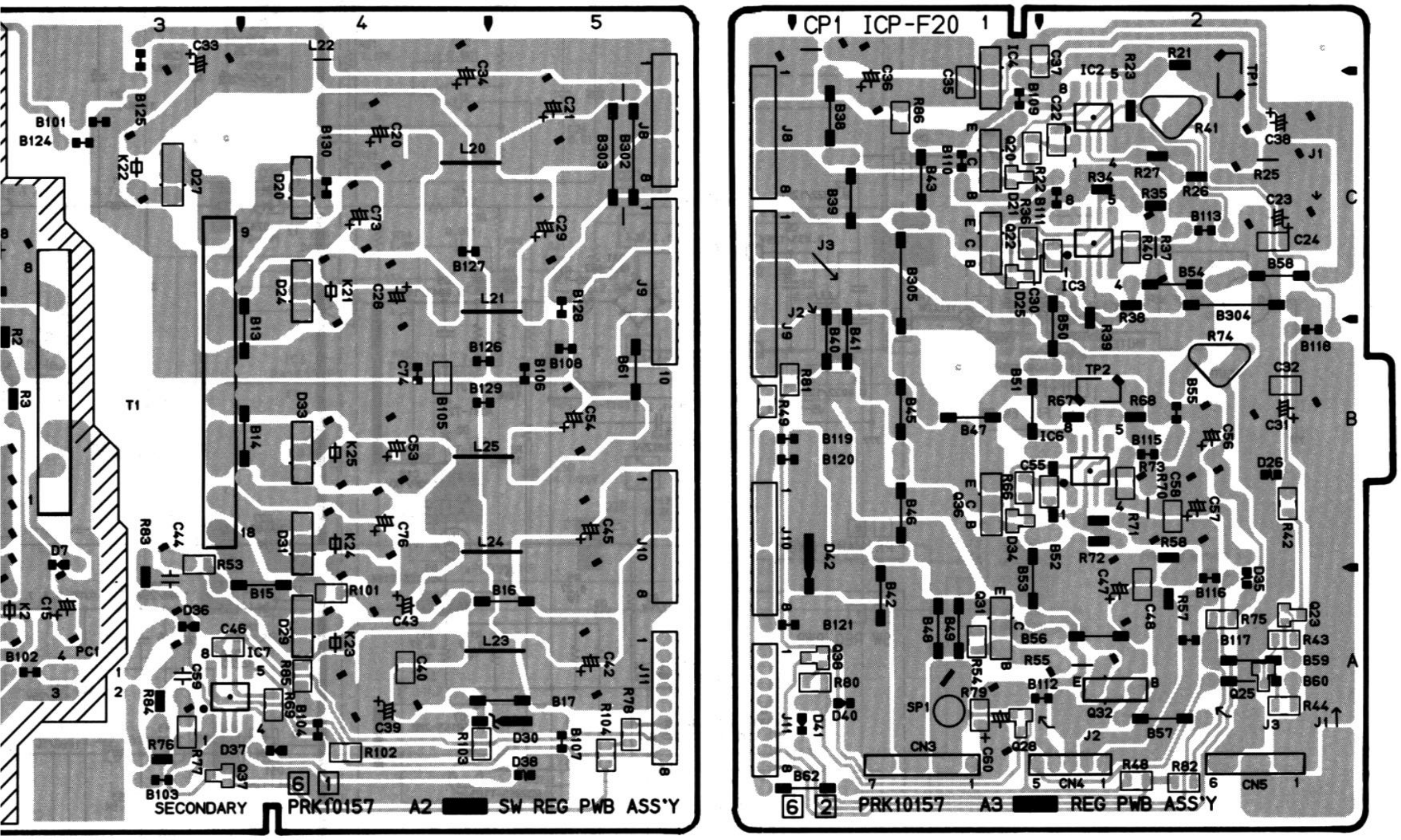
4

3

2

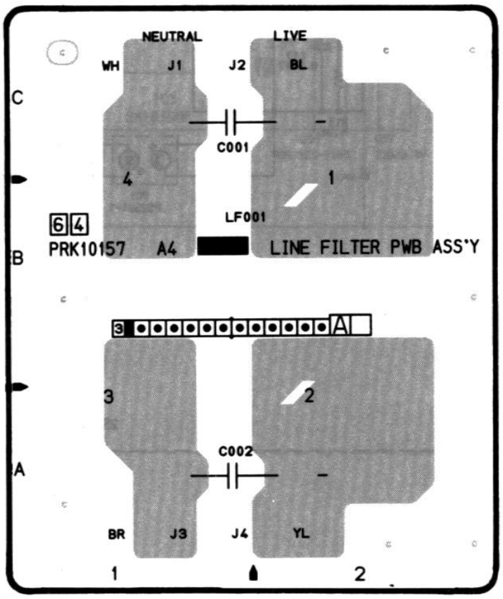
1

— SOLDER Side —



3
4
5
C33
L22
C34
C21
B101
B124
B125
K22
D27
B130
C20
D20
L20
B303
B302
J8
9
C73
C29
B127
D24
K21
C28
L21
B128
J9
B13
C74
B126
B105
B129
B106
B108
B61
10
T1
D33
B14
K25
C53
L25
C54
R2
R3
R83
C44
18
D31
K24
C76
L24
C45
J10
D7
R53
B15
R101
C43
B16
C15
K2
D36
D29
K23
L23
C46
PC1
IC7
C40
C42
J11
B102
C59
R85
R69
B104
B17
R78
R84
R76
R77
C39
R103
R104
D30
B107
D37
Q37
R102
D38
B103
SECONDARY
6 1
PRK10157 A2 SW REG PWB ASS'Y
CP1 ICP-F20
1
2
IC4
C35
C36
C37
IC2
R23
R21
TP1
J8
B38
R66
B109
C22
R41
C38
J1
B110
B43
Q20
R22
B111
D21
R36
R34
R27
R26
R25
C
B39
R35
B113
C23
C24
J3
Q22
R40
R37
J2
B305
IC3
D25
C30
B54
B58
J9
B40
B41
B50
R39
R38
B304
R74
B116
R81
R49
B51
TP2
B55
C32
B45
R67
R68
C31
B
B47
IC6
B115
C56
B119
B120
C55
D26
R65
R73
R70
C58
Q36
D34
R71
C57
R42
J10
D42
B46
R72
B52
R58
C47
B53
C48
D35
B42
Q31
B116
B121
B48
B49
R57
R75
Q23
B56
R43
R54
B117
A
Q38
R55
B59
R80
B112
R79
Q25
B60
SP1
J11
D40
D41
Q32
R44
C60
Q28
J2
B57
J3
J1
CN3
R48
R62
B62
CN4
CN5
7
6 2
PRK10157 A3 REG PWB ASS'Y

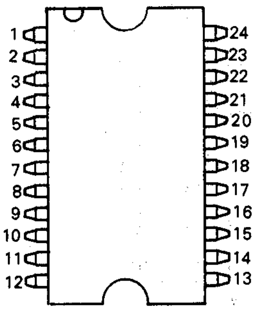
(PRK10157-01-04)

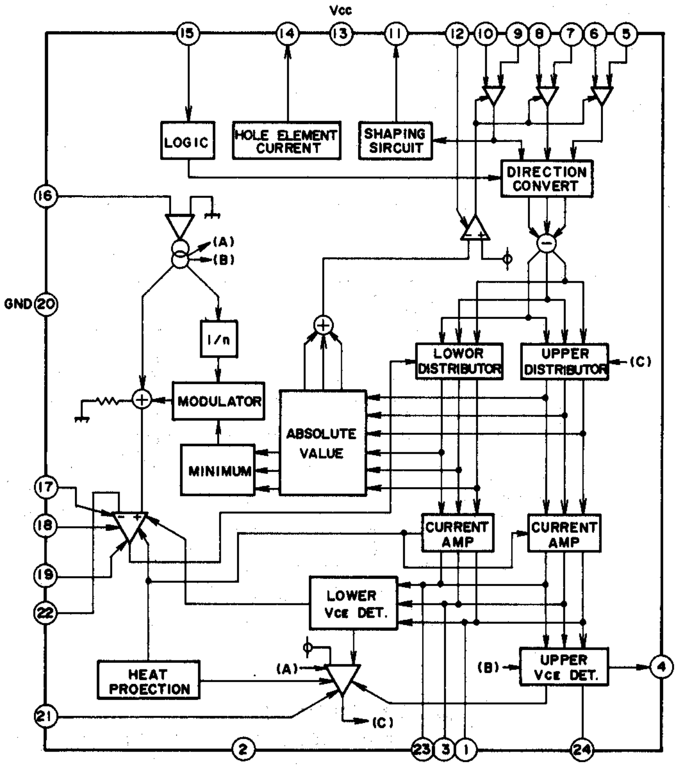


NEUTRAL
LIVE
WH
J1
J2
BL
C
C001
4
1
LF001
6 4
PRK10157 A4 LINE FILTER PWB ASS'Y
B
3 A
3
2
A
C002
BR
J3
J4
YL
1
2

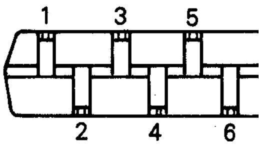
4.43 IC BLOCK DIAGRAM

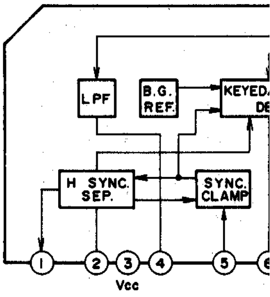
■ AN3834K 【MATSUSHITA】
(VTR Reel Motor Drive)


1
2
3
4
5
6
7
8
9
10
11
12
24
23
22
21
20
19
18
17
16
15
14
13

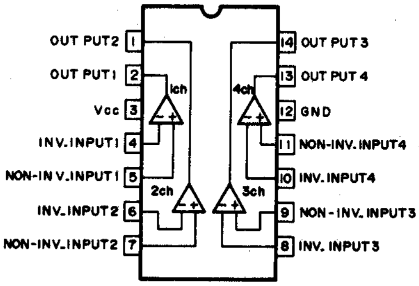

Vcc
15
14
13
11
12
10
9
8
7
6
5
LOGIC
HOLE ELEMENT CURRENT
SHAPING SIRCUIT
DIRECTION CONVERT
16
(A)
(B)
GND 20
1/n
LOWOR DISTRIBUTOR
UPPER DISTRIBUTOR
(C)
MODULATOR
ABSOLUTE VALUE
MINIMUM
17
18
19
22
CURRENT AMP
CURRENT AMP
LOWER VCE DET.
HEAT PROECTION
(A)
(B)
UPPER VCE DET.
4
21
(C)
2
23
3
1
24

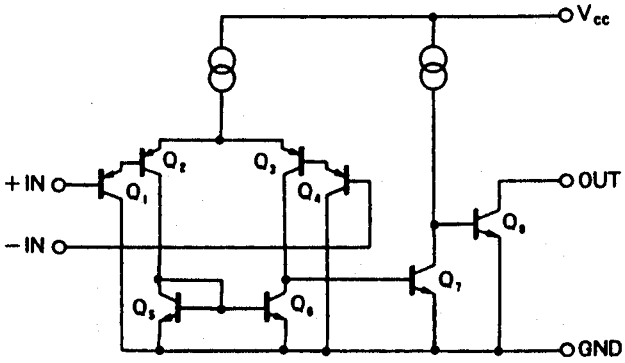
■ AN3916
(Video A



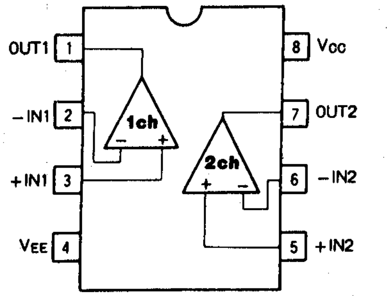

LPF
B.G. REF.
KEYED
H SYNC. SEP.
SYNC. CLAMP
1
2
3
4
5
Vcc

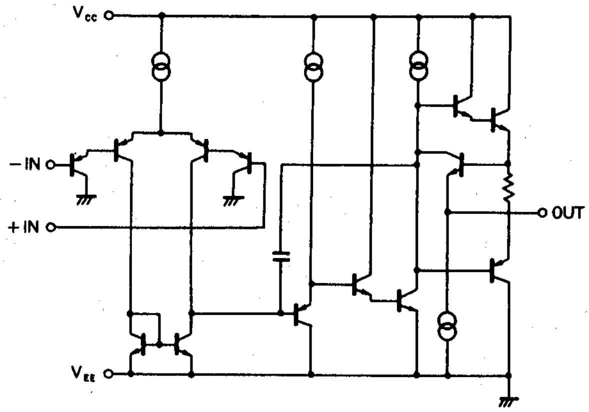
■ BA10339F 【ROHM】
(Quad Comparator)


OUT PUT2 1
OUT PUT1 2
Vcc 3
INV.INPUT1 4
NON-INV.INPUT1 5
INV.INPUT2 6
NON-INV.INPUT2 7
14 OUT PUT3
13 OUT PUT4
12 GND
11 NON-INV.INPUT4
10 INV.INPUT4
9 NON-INV.INPUT3
8 INV. INPUT3
1ch
4ch
2ch
3ch

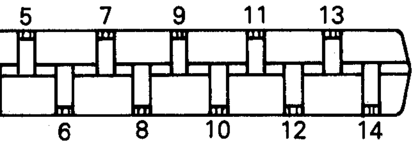

Vcc
+IN
−IN
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
OUT
GND

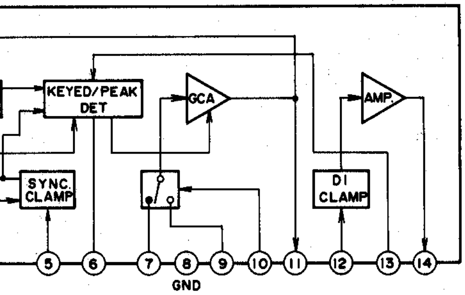
■ BA10358F 【ROHM】
(Dual Ground Sense Op.Amp)


OUT1 1
−IN1 2
+IN1 3
VEE 4
8 Vcc
7 OUT2
6 −IN2
5 +IN2
1ch
2ch


Vcc
−IN
+IN
OUT
VEE

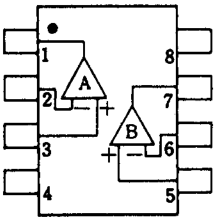
AN3916 【MATSUSHITA】
Video AGC)


5
7
9
11
13
6
8
10
12
14


KEYED/PEAK DET
GCA
AMP
SYNC. CLAMP
DI CLAMP
5
6
7
8
9
10
11
12
13
14
GND

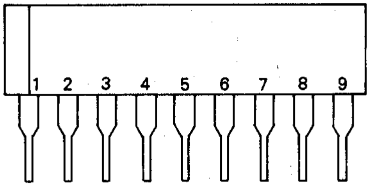
BA10393F 【ROHM】
(Dual Comparator)

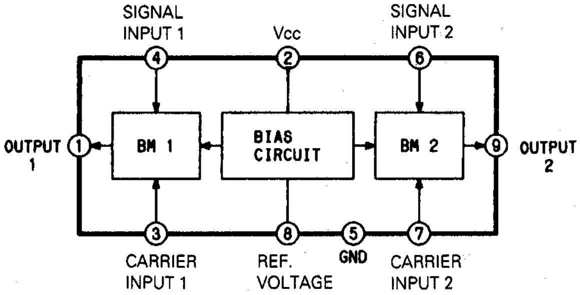
(Top View)


1
2
3
4
5
6
7
8
A
B
+
+

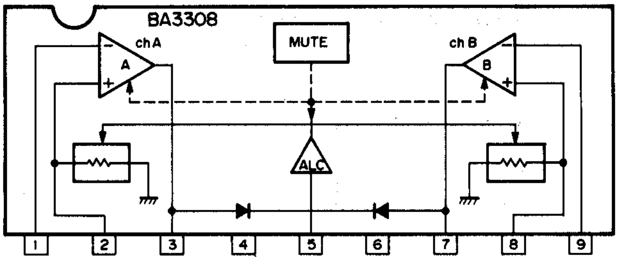
Pin
1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. V⁻
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V⁺

AN6041 【MATSUSHITA】
(Dual Balanced Modulator)

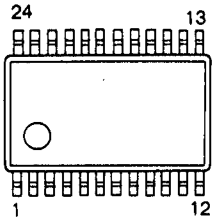


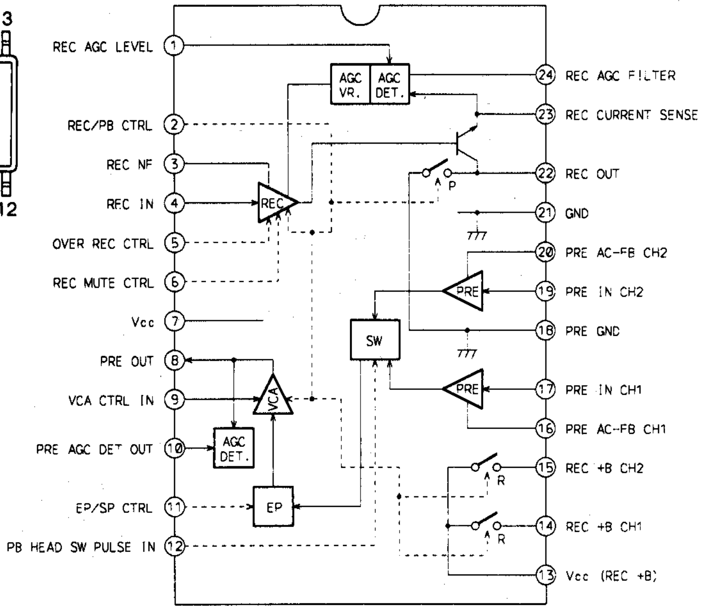

SIGNAL INPUT 1
Vcc
SIGNAL INPUT 2
4
2
6
OUTPUT 1
1
BM 1
BIAS CIRCUIT
BM 2
9
OUTPUT 2
3
8
5
7
GND
CARRIER INPUT 1
REF. VOLTAGE
CARRIER INPUT 2

BA3308F 【ROHM】
(Dual Pre.Amp With ALC)

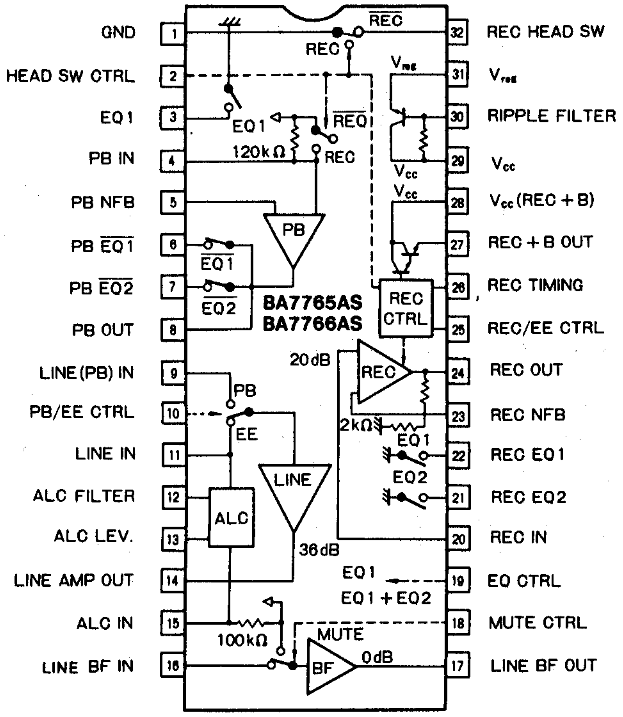

BA3308
chA
A
MUTE
chB
B
ALC
1
2
3
4
5
6
7
8
9

BA7743FS 【ROHM】
(VTR HiFi Audio Signal REC/PB Amp.)

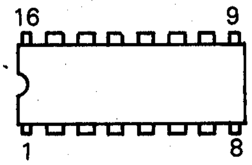



REC AGC LEVEL 1
REC/PB CTRL 2
REC NF 3
REC IN 4
OVER REC CTRL 5
REC MUTE CTRL 6
Vcc 7
PRE OUT 8
VCA CTRL IN 9
PRE AGC DET OUT 10
EP/SP CTRL 11
PB HEAD SW PULSE IN 12
24 REC AGC FILTER
23 REC CURRENT SENSE
22 REC OUT
21 GND
20 PRE AC-FB CH2
19 PRE IN CH2
18 PRE GND
17 PRE IN CH1
16 PRE AC-FB CH1
15 REC +B CH2
14 REC +B CH1
13 Vcc (REC +B)
AGC VR.
AGC DET.
REC
PRE
SW
VCA
AGC DET.
EP
P
R
R

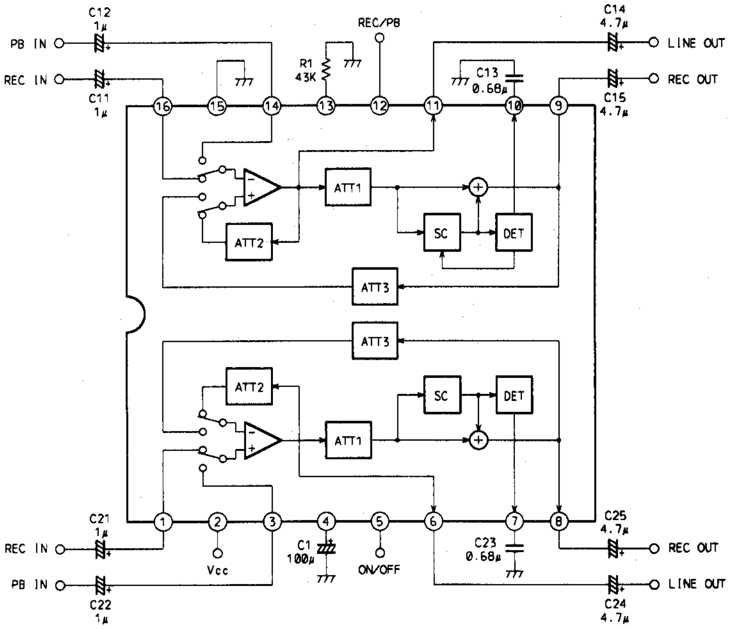
■ BA7765AS 【ROHM】
(Normal Audio Signal Processor)


GND 1
HEAD SW CTRL 2
EQ 1 3
PB IN 4
PB NFB 5
PB EQ1 6
PB EQ2 7
PB OUT 8
LINE (PB) IN 9
PB/EE CTRL 10
LINE IN 11
ALC FILTER 12
ALC LEV. 13
LINE AMP OUT 14
ALC IN 15
LINE BF IN 16
32 REC HEAD SW
31 Vreg
30 RIPPLE FILTER
29 Vcc
28 Vcc (REC + B)
27 REC + B OUT
26 REC TIMING
25 REC/EE CTRL
24 REC OUT
23 REC NFB
22 REC EQ 1
21 REC EQ 2
20 REC IN
19 EQ CTRL
18 MUTE CTRL
17 LINE BF OUT
REC
REC
Vreg
EQ 1
120kΩ
REQ
REC
Vcc
Vcc
PB
EQ1
EQ2
BA7765AS
BA7766AS
REC CTRL
20dB
REC
2kΩ
EQ1
EQ2
PB
EE
LINE
ALC
36dB
EQ1
EQ1 + EQ2
100kΩ
MUTE
BF
0dB

■ CXA1101P 【SONY】
(Dolby Noise Reduction Circuit)

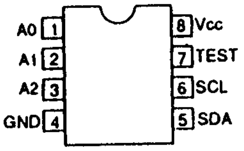


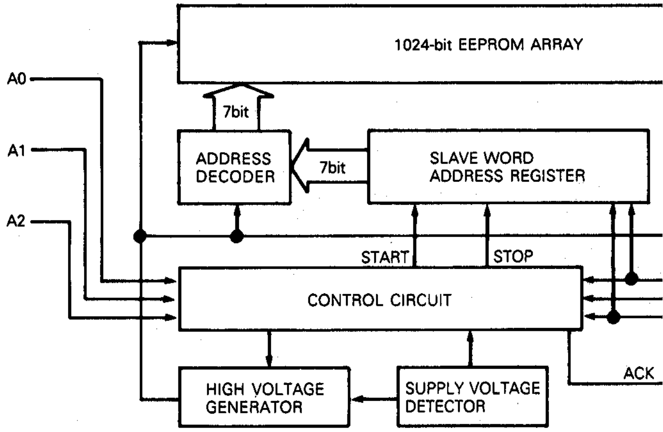
— CXA1102M —


PB IN
REC IN
C12 1μ
C11 1μ
REC/PB
R1 43K
C13 0.68μ
C14 4.7μ
C15 4.7μ
LINE OUT
REC OUT
16
15
14
13
12
11
10
9
ATT1
ATT2
ATT3
SC
DET
ATT3
ATT2
SC
DET
ATT1
1
2
3
4
5
6
7
8
C21 1μ
C22 1μ
REC IN
PB IN
Vcc
C1 100μ
ON/OFF
C23 0.68μ
C25 4.7μ
C24 4.7μ
REC OUT
LINE OUT

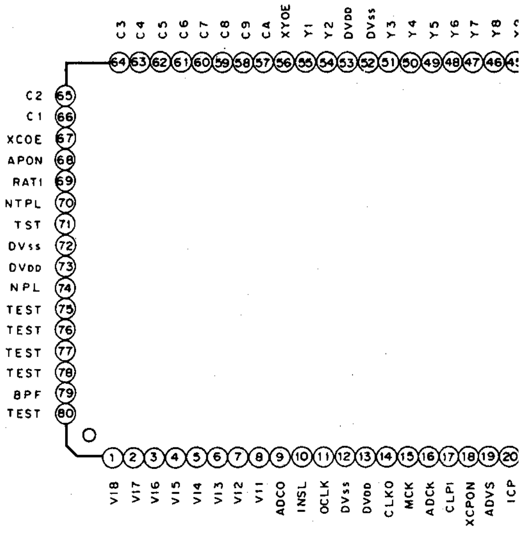
ATT Attenuator
SC Side Chain
DET Detector

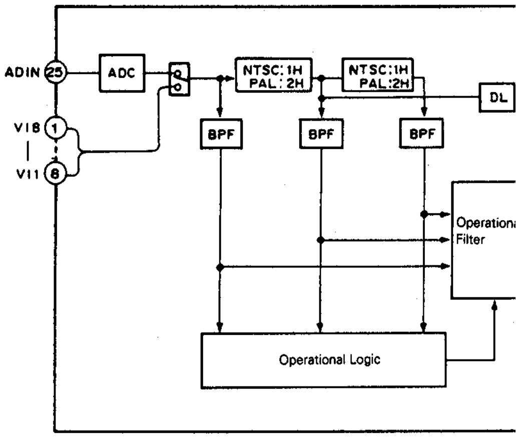
■ BR24C01AF 【ROHM】
(IIC Bus 1k Serial EEPROM)


A0 1
A1 2
A2 3
GND 4
8 Vcc
7 TEST
6 SCL
5 SDA

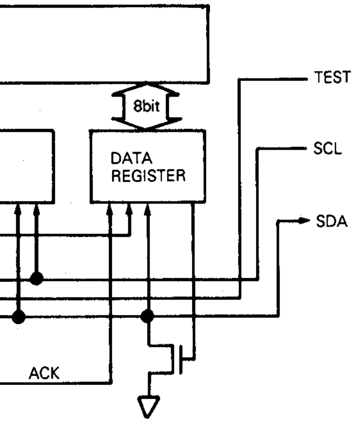

1024-bit EEPROM ARRAY
7bit
ADDRESS DECODER
7bit
SLAVE WORD ADDRESS REGISTER
A0
A1
A2
START
STOP
CONTROL CIRCUIT
ACK
HIGH VOLTAGE GENERATOR
SUPPLY VOLTAGE DETECTOR

■ CXD2024AQ 【SONY】
(Digital COMB Filter)

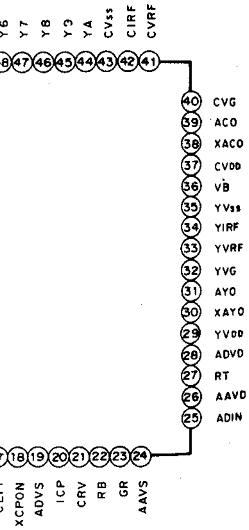

C3 64
C4 63
C5 62
C6 61
C7 60
C8 59
C9 58
CA 57
XYOE 56
Y1 55
Y2 54
DVDD 53
DVss 52
Y3 51
Y4 50
Y5 49
Y6 48
Y7 47
Y8 46
C2 65
C1 66
XCOE 67
APON 68
RAT1 69
NTPL 70
TST 71
DVss 72
DVDD 73
NPL 74
TEST 75
TEST 76
TEST 77
TEST 78
BPF 79
TEST 80
VI8 1
VI7 2
VI6 3
VI5 4
VI4 5
VI3 6
VI2 7
VI1 8
ADCO 9
INSL 10
OCLK 11
DVss 12
DVDD 13
CLKO 14
MCK 15
ADCK 16
CLPI 17
XCPON 18
ADVS 19
20

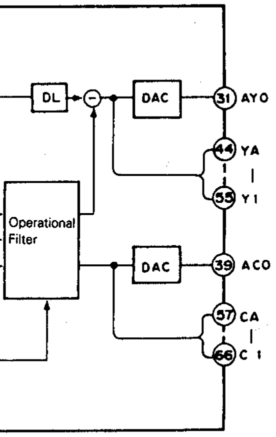

ADIN 25
ADC
NTSC:1H PAL:2H
NTSC:1H PAL:2H
DL
VI8 1
VI1 8
BPF
BPF
BPF
Operation Filter
Operational Logic

ROM)

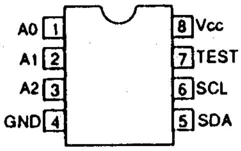

8bit
DATA REGISTER
TEST
SCL
SDA
ACK

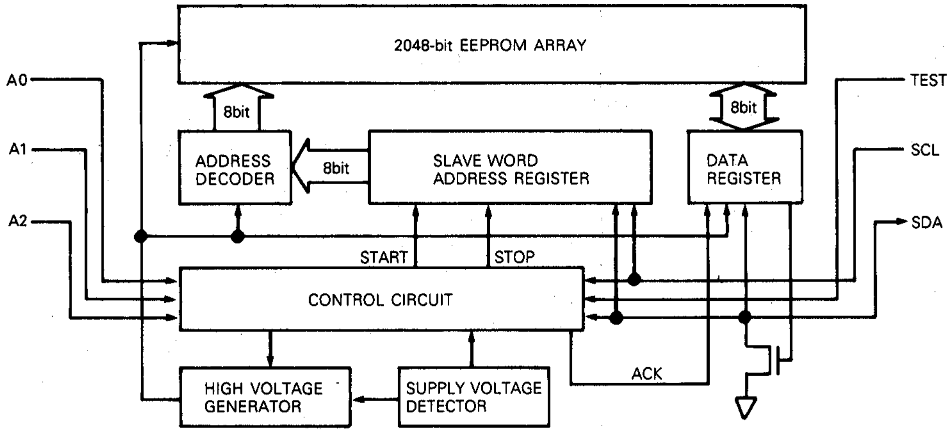
Y】
)


Y6
Y7
Y8
Y9
YA
CVss
CIRF
CVRF
47
46
45
44
43
42
41
40 CVG
39 ACO
38 XACO
37 CVDD
36 VB
35 YVss
34 YIRF
33 YVRF
32 YVG
31 AYO
30 XAYO
29 YVDD
28 ADVD
27 RT
26 AAVD
25 ADIN
18
19
20
21
22
23
24
XCPON
ADVS
ICP
CRV
RB
GR
AAVS

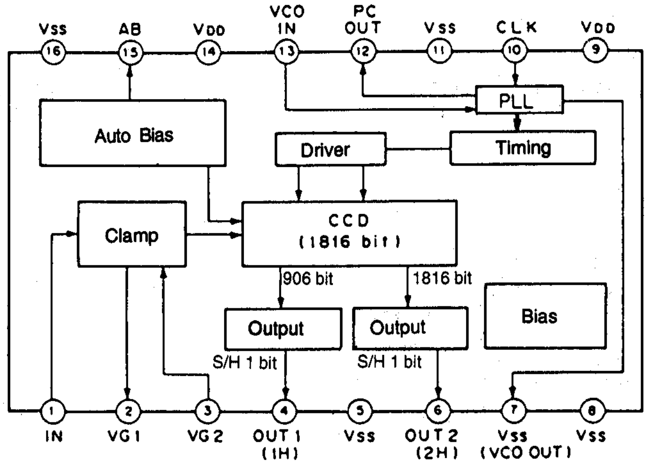

DL
DAC
31 AYO
44 YA
55 Y1
Operational Filter
DAC
39 ACO
57 CA
66 C1

■ BR24C02F 【ROHM】
(IIC Bus 2k Serial EEPROM)

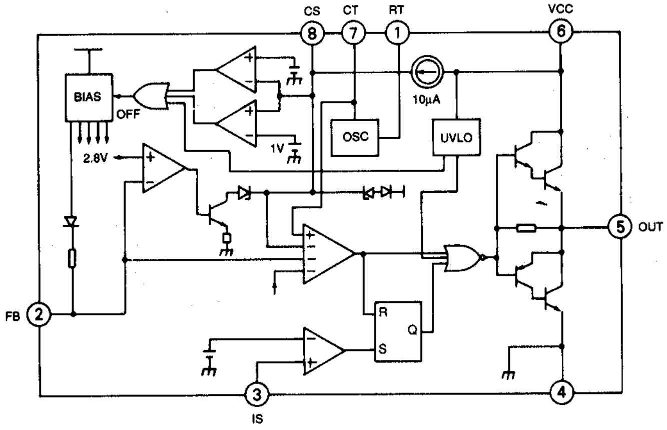

A0 1
A1 2
A2 3
GND 4
8 Vcc
7 TEST
6 SCL
5 SDA

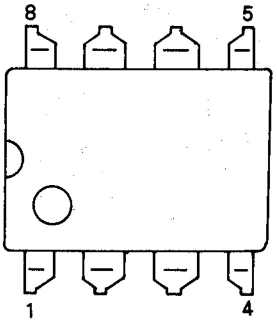

2048-bit EEPROM ARRAY
A0
A1
A2
8bit
ADDRESS DECODER
8bit
SLAVE WORD ADDRESS REGISTER
8bit
DATA REGISTER
TEST
SCL
SDA
START
STOP
CONTROL CIRCUIT
ACK
HIGH VOLTAGE GENERATOR
SUPPLY VOLTAGE DETECTOR

■ CXL5509M 【SONY】
(NTSC CMOS-CCD 1H/2H Delay Line)

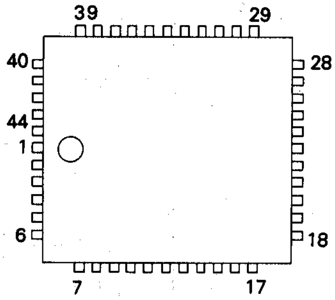

VSS 16
AB 15
VDD 14
VCO IN 13
PC OUT 12
VSS 11
CLK 10
VDD 9
PLL
Auto Bias
Driver
Timing
Clamp
CCD (1816 bit)
906 bit
1816 bit
Output
Output
Bias
S/H 1 bit
S/H 1 bit
1 IN
2 VG1
3 VG2
4 OUT 1 (1H)
5 VSS
6 OUT 2 (2H)
7 VSS (VCO OUT)
8 VSS

■ FA5311P 【FUJI ELECTRIC】
(PWM Switching Regulator)

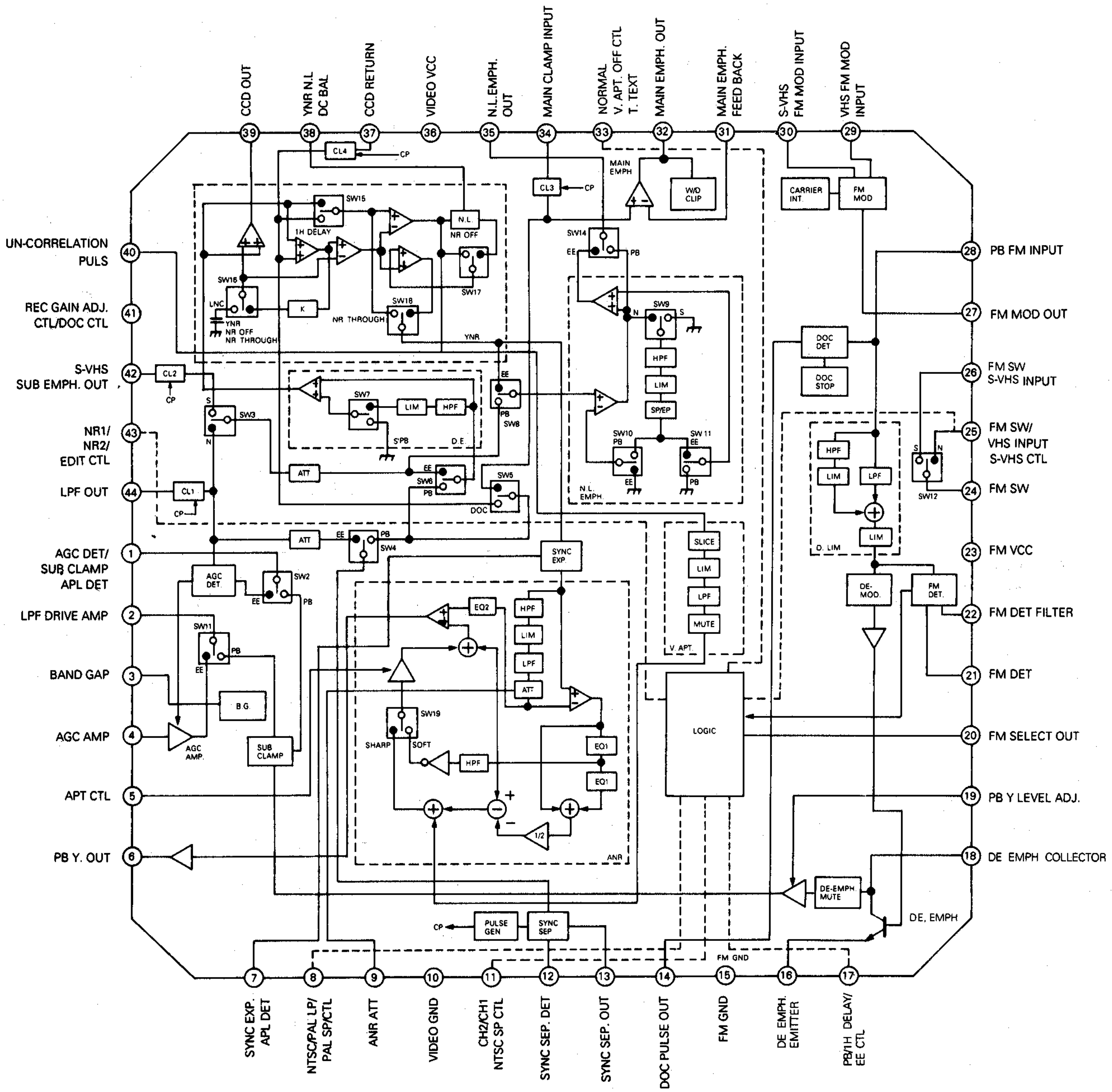

CS 8
CT 7
RT 1
VCC 6
BIAS
OFF
10μA
2.8V
1V
OSC
UVLO
5 OUT
FB 2
R
S
Q
3 IS
4



■ JCP0032-HT 【JVC】
(FM Signal Processor)

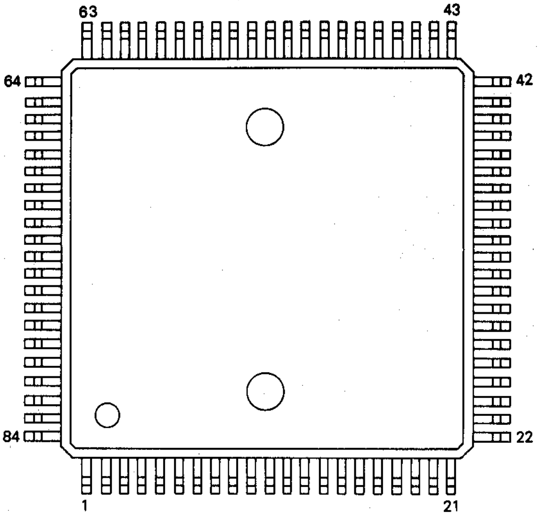


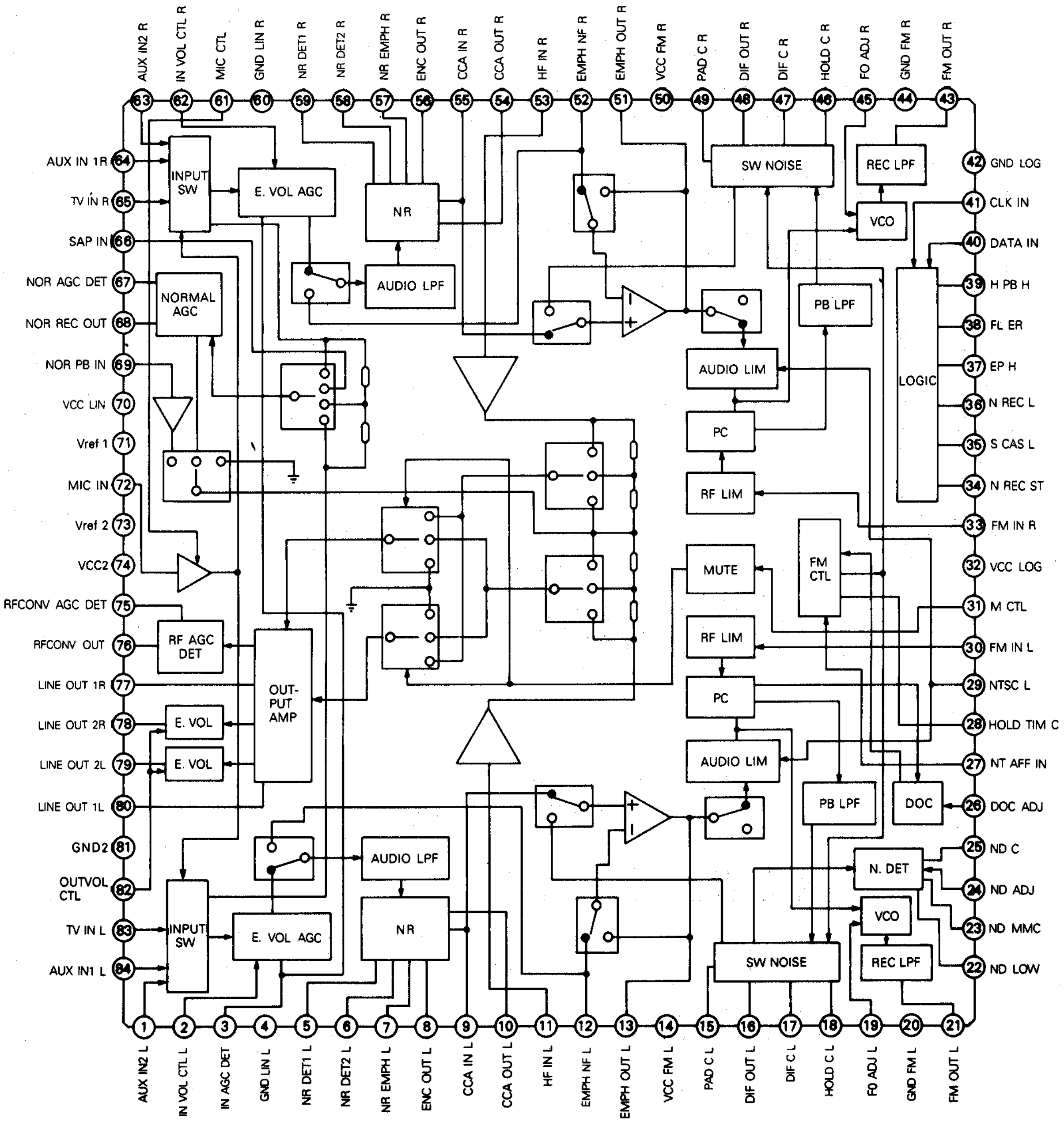
39
29
40
28
44
1
6
18
7
17



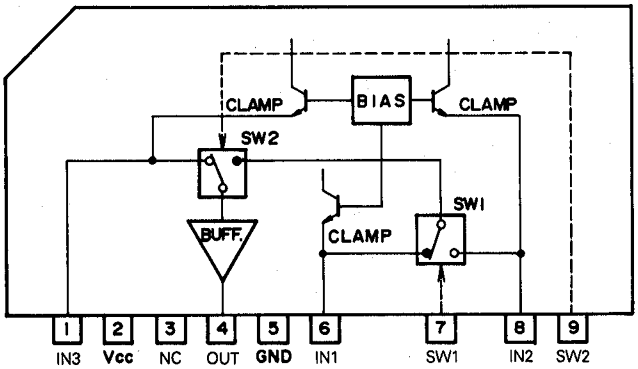
CCD OUT
YNR N.L DC BAL
CCD RETURN
VIDEO VCC
N.L.EMPH. OUT
MAIN CLAMP INPUT
NORMAL V. APT. OFF CTL T. TEXT
MAIN EMPH. OUT
MAIN EMPH. FEED BACK
S-VHS FM MOD INPUT
VHS FM MOD INPUT
39
38
37
36
35
34
33
32
31
30
29
UN-CORRELATION PULS
40
REC GAIN ADJ. CTL/DOC CTL
41
S-VHS SUB EMPH. OUT
42
NR1/ NR2/ EDIT CTL
43
LPF OUT
44
AGC DET/ SUB CLAMP APL DET
1
LPF DRIVE AMP
2
BAND GAP
3
AGC AMP
4
APT CTL
5
PB Y. OUT
6
28
PB FM INPUT
27
FM MOD OUT
26
FM SW S-VHS INPUT
25
FM SW/ VHS INPUT S-VHS CTL
24
FM SW
23
FM VCC
22
FM DET FILTER
21
FM DET
20
FM SELECT OUT
19
PB Y LEVEL ADJ.
18
DE EMPH COLLECTOR
7
8
9
10
11
12
13
14
15
16
17
SYNC EXP. APL DET
NTSC/PAL LP/ PAL SP/CTL
ANR ATT
VIDEO GND
CH2/CH1 NTSC SP CTL
SYNC SEP. DET
SYNC SEP. OUT
DOC PULSE OUT
FM GND
DE EMPH. EMITTER
PB/1H DELAY/ EE CTL
CL4
CP
CL3
CP
MAIN EMPH
W/D CLIP
CARRIER INT.
FM MOD
SW15
1H DELAY
N.L
NR OFF
SW17
SW16
LNC
YNR
NR OFF
NR THROUGH
K
SW18
NR THROUGH
YNR
SW14
EE
PB
SW9
N
S
HPF
LIM
SP/EP
SW10
PB
EE
SW 11
EE
PB
N.L. EMPH
DOC DET
DOC STOP
CL2
CP
S
SW3
N
SW7
LIM
HPF
S/PB
D.E
EE
PB
SW8
ATT
EE
SW6
PB
SW5
DOC
CL1
CP
ATT
EE
PB
SW4
SYNC EXP
SLICE
LIM
LPF
MUTE
V. APT
HPF
LIM
LPF
LIM
D. LIM
S
N
SW12
AGC DET.
SW2
EE
PB
SW11
PB
EE
B.G
AGC AMP.
SUB CLAMP
EQ2
HPF
LIM
LPF
ATT
SW19
SHARP
SOFT
HPF
EQ1
EQ1
1/2
ANR
LOGIC
DE-MOD.
FM DET.
DE-EMPH MUTE
DE. EMPH
PULSE GEN
SYNC SEP
CP
FM GND

■ JCP0038 【JVC】
(FMA Signal Processor)


63
43
64
42
84
22
1
21

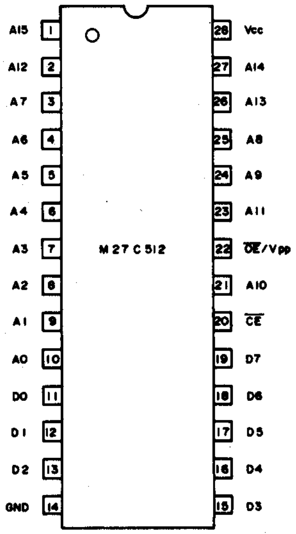

AUX IN2 R
IN VOL CTL R
MIC CTL
GND LIN R
NR DET1 R
NR DET2 R
NR EMPH R
ENC OUT R
CCA IN R
CCA OUT R
HF IN R
EMPH NF R
EMPH OUT R
VCC FM R
PAD C R
DIF OUT R
DIF C R
HOLD C R
FO ADJ R
GND FM R
FM OUT R
63
62
61
60
59
58
57
56
55
54
53
52
51
50
49
48
47
46
45
44
43
AUX IN 1R 64
TV IN R 65
SAP IN 66
NOR AGC DET 67
NOR REC OUT 68
NOR PB IN 69
VCC LIN 70
Vref 1 71
MIC IN 72
Vref 2 73
VCC2 74
RFCONV AGC DET 75
RFCONV OUT 76
LINE OUT 1R 77
LINE OUT 2R 78
LINE OUT 2L 79
LINE OUT 1L 80
GND2 81
OUTVOL CTL 82
TV IN L 83
AUX IN1 L 84
42 GND LOG
41 CLK IN
40 DATA IN
39 H PB H
38 FL ER
37 EP H
36 N REC L
35 S CAS L
34 N REC ST
33 FM IN R
32 VCC LOG
31 M CTL
30 FM IN L
29 NTSC L
28 HOLD TIM C
27 NT AFF IN
26 DOC ADJ
25 ND C
24 ND ADJ
23 ND MMC
22 ND LOW
INPUT SW
E. VOL AGC
NR
AUDIO LPF
SW NOISE
REC LPF
VCO
LOGIC
PB LPF
AUDIO LIM
PC
RF LIM
MUTE
FM CTL
NORMAL AGC
RF AGC DET
OUT-PUT AMP
E. VOL
E. VOL
PC
AUDIO LIM
RF LIM
PB LPF
DOC
N. DET
VCO
REC LPF
SW NOISE
AUDIO LPF
NR
E. VOL AGC
INPUT SW
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
AUX IN2 L
IN VOL CTL L
IN AGC DET
GND LIN L
NR DET1 L
NR DET2 L
NR EMPH L
ENC OUT L
CCA IN L
CCA OUT L
HF IN L
EMPH NF L
EMPH OUT L
VCC FM L
PAD C L
DIF OUT L
DIF C L
HOLD C L
FO ADJ L
GND FM L
FM OUT L

■ LVA523SA 【MITSUMI】
(Switch)



CLAMP
BIAS
CLAMP
SW2
BUFF.
CLAMP
SW1
1 IN3
2 Vcc
3 NC
4 OUT
5 GND
6 IN1
7 SW1
8 IN2
9 SW2

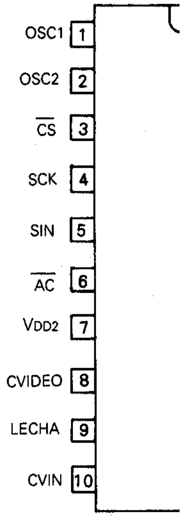
■ M27C512-15F1 【MITSUBISHI】
(524288 Bit Programmed EP ROM)



A15 1
A12 2
A7 3
A6 4
A5 5
A4 6
A3 7
A2 8
A1 9
A0 10
D0 11
D1 12
D2 13
GND 14
28 Vcc
27 A14
26 A13
25 A8
24 A9
23 A11
22 $\overline{OE}$/Vpp
21 A10
20 $\overline{CE}$
19 D7
18 D6
17 D5
16 D4
15 D3
M27C512

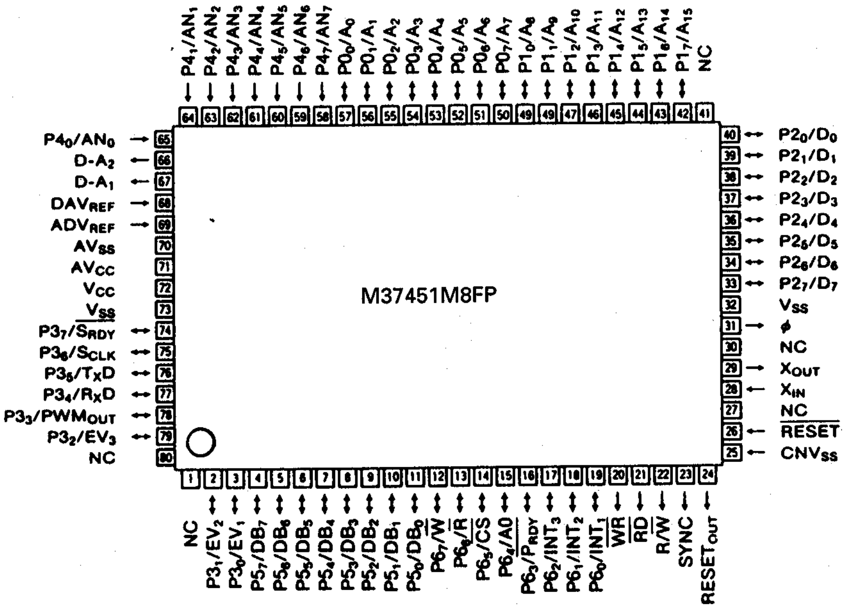
(TOP VIEW)

■ M35010-0
(Charactor



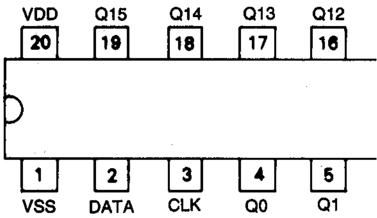
OSC1 1
OSC2 2
$\overline{CS}$ 3
SCK 4
SIN 5
$\overline{AC}$ 6
VDD2 7
CVIDEO 8
LECHA 9
CVIN 10

■ M37451EM8-000FP 【JVC】
(8 Bit CMOS Micro Computer)

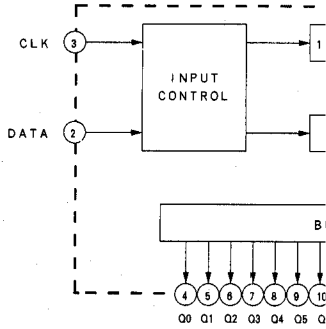


64 $P4_1/AN_1$
63 $P4_2/AN_2$
62 $P4_3/AN_3$
61 $P4_4/AN_4$
60 $P4_5/AN_5$
59 $P4_6/AN_6$
58 $P4_7/AN_7$
57 $P0_0/A_0$
56 $P0_1/A_1$
55 $P0_2/A_2$
54 $P0_3/A_3$
53 $P0_4/A_4$
52 $P0_5/A_5$
51 $P0_6/A_6$
50 $P0_7/A_7$
49 $P1_0/A_8$
48 $P1_1/A_9$
47 $P1_2/A_{10}$
46 $P1_3/A_{11}$
45 $P1_4/A_{12}$
44 $P1_5/A_{13}$
43 $P1_6/A_{14}$
42 $P1_7/A_{15}$
41 NC
$P4_0/AN_0$ 65
$D\text{-}A_2$ 66
$D\text{-}A_1$ 67
DAV_{REF} 68
ADV_{REF} 69
AV_{SS} 70
AV_{CC} 71
V_{CC} 72
$\overline{V_{SS}}$ 73
$P3_7/S_{RDY}$ 74
$P3_6/S_{CLK}$ 75
$P3_5/T_XD$ 76
$P3_4/R_XD$ 77
$P3_3/PWM_{OUT}$ 78
$P3_2/EV_3$ 79
NC 80
M37451M8FP
40 $P2_0/D_0$
39 $P2_1/D_1$
38 $P2_2/D_2$
37 $P2_3/D_3$
36 $P2_4/D_4$
35 $P2_5/D_5$
34 $P2_6/D_6$
33 $P2_7/D_7$
32 V_{SS}
31 ϕ
30 NC
29 X_{OUT}
28 X_{IN}
27 NC
26 $\overline{RESET}$
25 CNV_{SS}
1 NC
2 $P3_1/EV_2$
3 $P3_0/EV_1$
4 $P5_7/DB_7$
5 $P5_6/DB_6$
6 $P5_5/DB_5$
7 $P5_4/DB_4$
8 $P5_3/DB_3$
9 $P5_2/DB_2$
10 $P5_1/DB_1$
11 $P5_0/DB_0$
12 $P6_7/\overline{W}$
13 $P6_6/\overline{R}$
14 $P6_5/\overline{CS}$
15 $P6_4/\overline{A0}$
16 $P6_3/P_{RDY}$
17 $P6_2/\overline{INT_3}$
18 $P6_1/\overline{INT_2}$
19 $P6_0/\overline{INT_1}$
20 $\overline{WR}$
21 $\overline{RD}$
22 R/W
23 SYNC
24 $RESET_{OUT}$

■ M50255P 【MIT
(16 Bit Serial/Pa

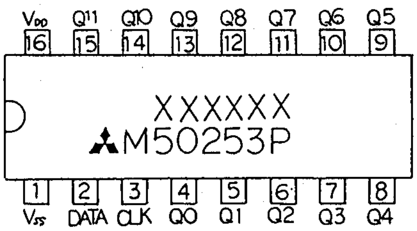


VDD 20
Q15 19
Q14 18
Q13 17
Q12 16
1 VSS
2 DATA
3 CLK
4 Q0
5 Q1



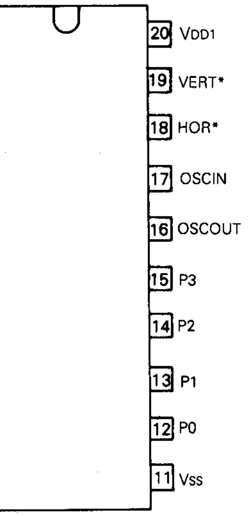
CLK 3
DATA 2
INPUT CONTROL
4 Q0
5 Q1
6 Q2
7 Q3
8 Q4
9 Q5

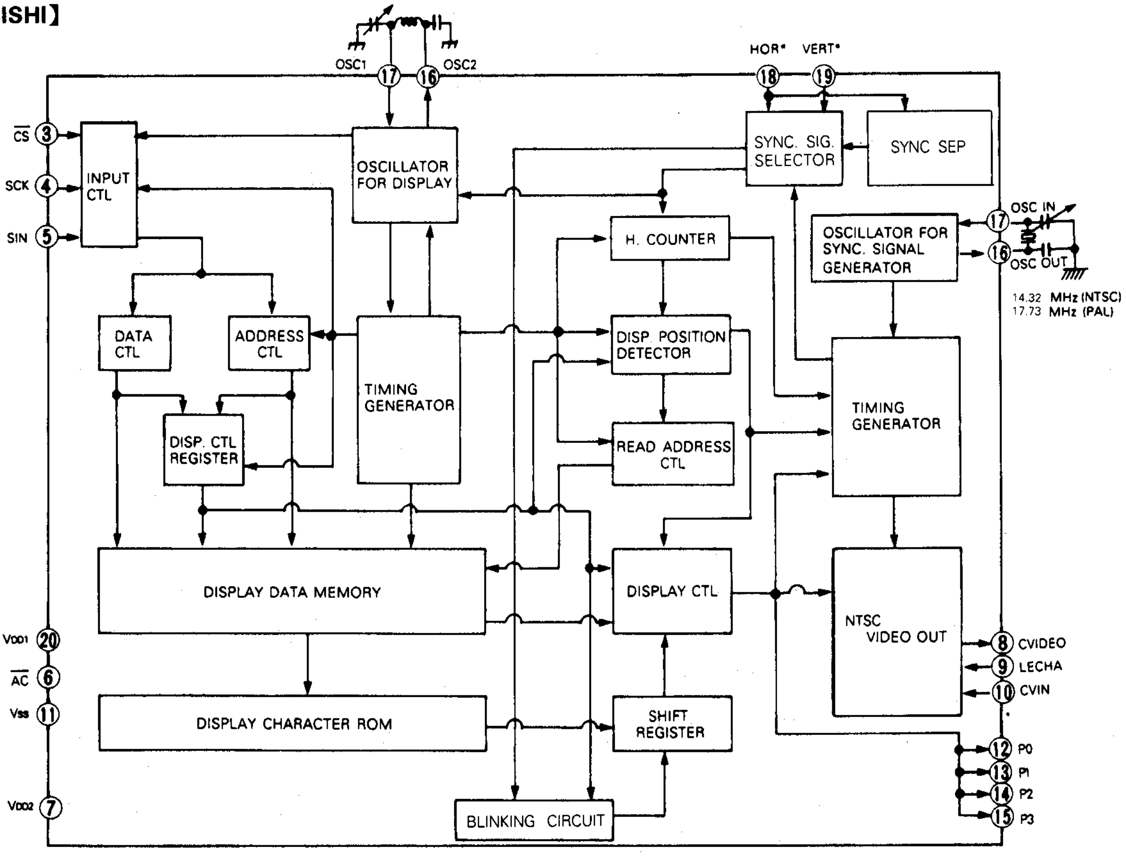
■ M50253P 【MITSUBISHI】
(Serial/Parallel Converter)



V_{DD} 16
Q11 15
Q10 14
Q9 13
Q8 12
Q7 11
Q6 10
Q5 9
XXXXXX
M50253P
1 V_{SS}
2 DATA
3 CLK
4 Q0
5 Q1
6 Q2
7 Q3
8 Q4

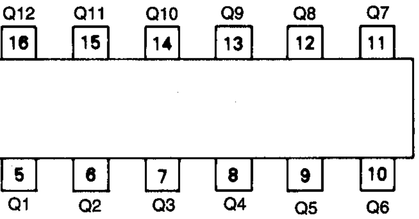
010-089SP 【MITSUBISHI】
ractor Generator)

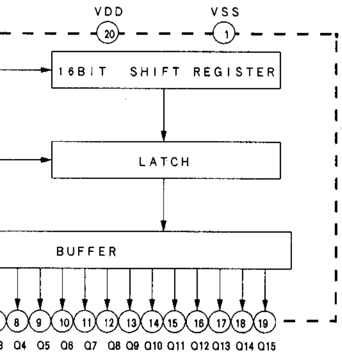

20 VDD1
19 VERT*
18 HOR*
17 OSCIN
16 OSCOUT
15 P3
14 P2
13 P1
12 P0
11 Vss


OSC1
17
16
OSC2
HOR*
VERT*
18
19
CS 3
SCK 4
SIN 5
INPUT CTL
OSCILLATOR FOR DISPLAY
SYNC. SIG. SELECTOR
SYNC SEP
H. COUNTER
OSCILLATOR FOR SYNC. SIGNAL GENERATOR
17 OSC IN
16 OSC OUT
14.32 MHz (NTSC)
17.73 MHz (PAL)
DATA CTL
ADDRESS CTL
TIMING GENERATOR
DISP. POSITION DETECTOR
DISP. CTL REGISTER
READ ADDRESS CTL
TIMING GENERATOR
DISPLAY DATA MEMORY
DISPLAY CTL
NTSC VIDEO OUT
8 CVIDEO
9 LECHA
10 CVIN
VDD1 20
AC 6
Vss 11
DISPLAY CHARACTER ROM
SHIFT REGISTER
12 P0
13 P1
14 P2
15 P3
VDD2 7
BLINKING CIRCUIT

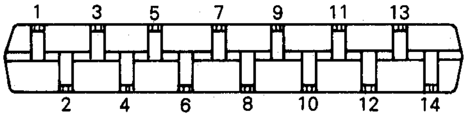
* : Input/output polarity of HOR and VERT is selectable at determination of charactor font.

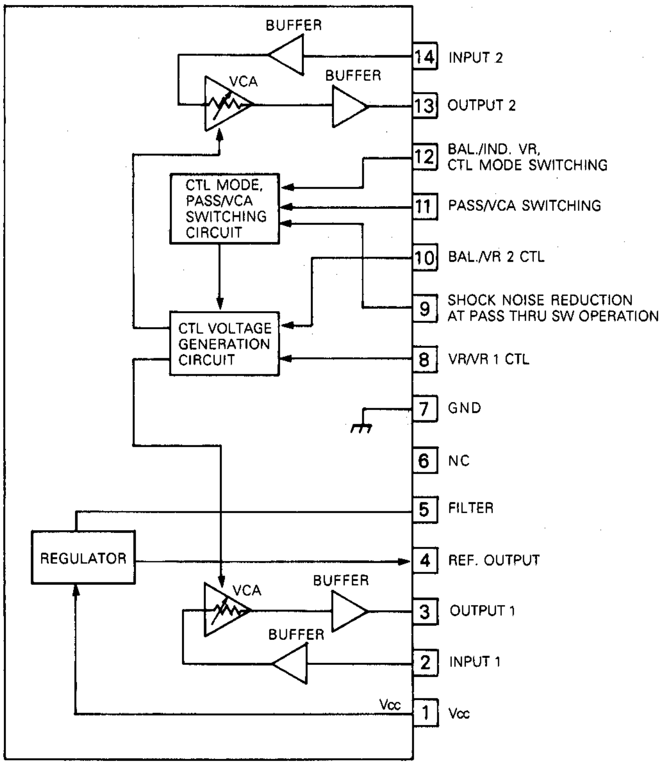
【MITSUBISHI】
erial/Parallel Converter)


Q12 16
Q11 15
Q10 14
Q9 13
Q8 12
Q7 11
5 Q1
6 Q2
7 Q3
8 Q4
9 Q5
10 Q6

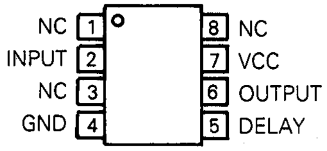

VDD 20
VSS 1
16BIT SHIFT REGISTER
LATCH
BUFFER
8 9 10 11 12 13 14 15 16 17 18 19
3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11 Q12 Q13 Q14 Q15

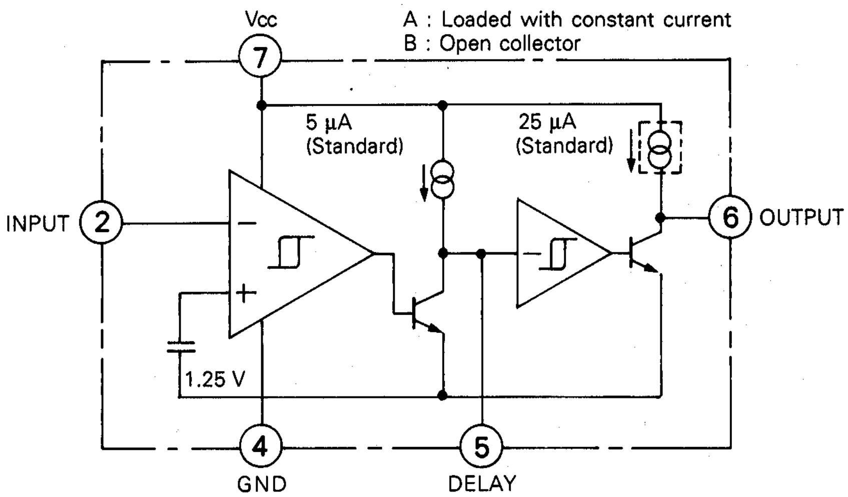
■ M51132L 【MITSUBISHI】
(2-Channel Erectrical Volume)


1 3 5 7 9 11 13
2 4 6 8 10 12 14

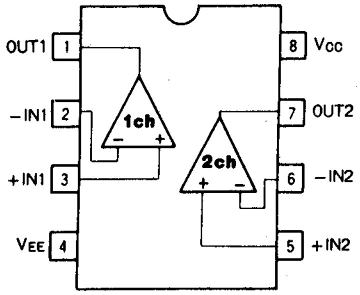

BUFFER
VCA
BUFFER
14 INPUT 2
13 OUTPUT 2
12 BAL./IND. VR, CTL MODE SWITCHING
CTL MODE, PASS/VCA SWITCHING CIRCUIT
11 PASS/VCA SWITCHING
10 BAL./VR 2 CTL
9 SHOCK NOISE REDUCTION AT PASS THRU SW OPERATION
CTL VOLTAGE GENERATION CIRCUIT
8 VR/VR 1 CTL
7 GND
6 NC
5 FILTER
REGULATOR
4 REF. OUTPUT
VCA
BUFFER
3 OUTPUT 1
BUFFER
2 INPUT 1
Vcc
1 Vcc

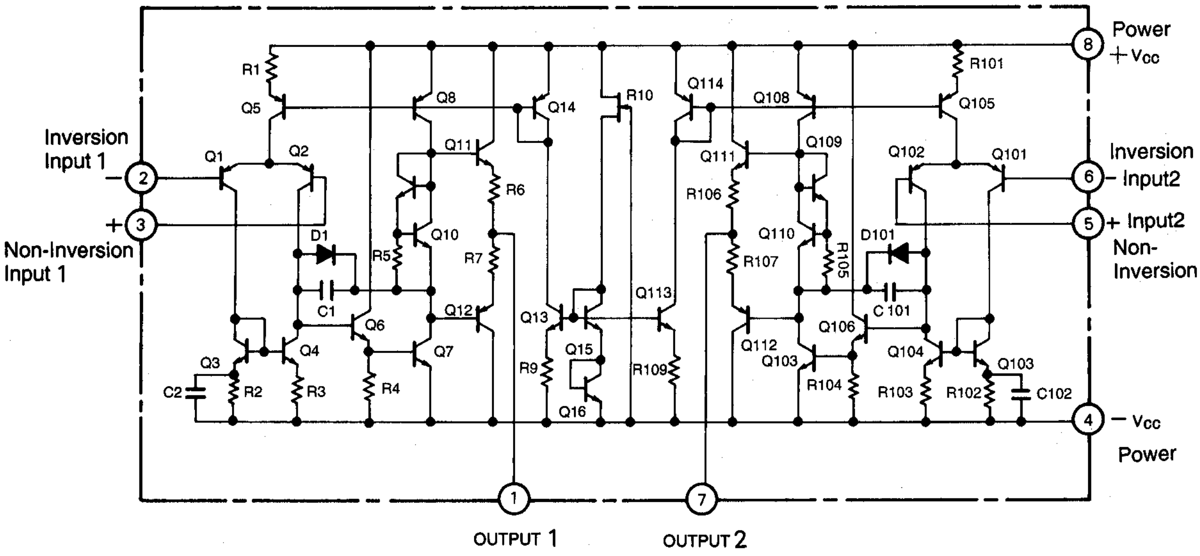
■ M51957BFP 【MITSUBISHI】
(Voltage Detector/System Reset)


NC 1
INPUT 2
NC 3
GND 4
8 NC
7 VCC
6 OUTPUT
5 DELAY

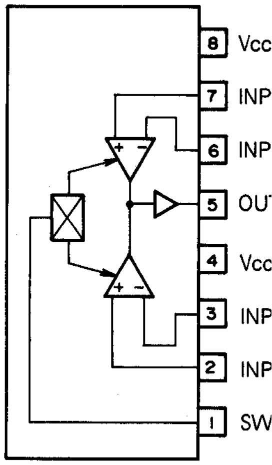

Vcc
7
A : Loaded with constant current
B : Open collector
5 µA
(Standard)
25 µA
(Standard)
INPUT
2
6
OUTPUT
1.25 V
4
GND
5
DELAY

■ M5218AFP-XE1 【MITSUBISHI】
(Dual Op.Amp)


OUT1 1
−IN1 2
+IN1 3
VEE 4
8 Vcc
7 OUT2
6 −IN2
5 +IN2
1ch
2ch

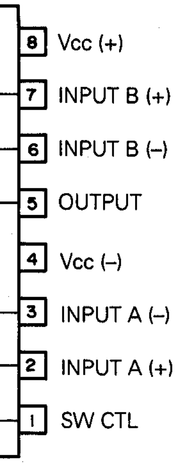

Power
+Vcc
8
Inversion
Input 1
−2
+3
Non-Inversion
Input 1
Inversion
6 − Input2
5 + Input2
Non-
Inversion
4 − Vcc
Power
1
OUTPUT 1
7
OUTPUT 2
R1
Q5
Q1
Q2
D1
C1
Q3
C2
R2
Q4
R3
Q6
R4
Q8
Q11
R6
Q10
R5
R7
Q12
Q7
Q14
R10
Q13
Q15
R9
Q16
Q113
R109
Q114
Q108
Q109
Q111
R106
Q110
R105
R107
Q112
Q103
Q106
R104
R101
Q105
Q102
Q101
D101
C 101
Q104
Q103
R103
R102
C102

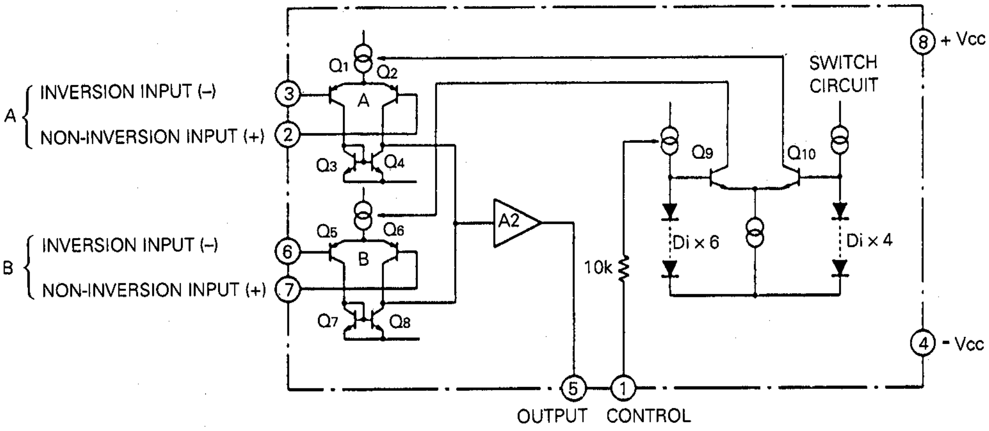
■


8 Vcc
7 INP
6 INP
5 OU
4 Vcc
3 INP
2 INP
1 SW

■ M5218AP 【M
(Reference M5

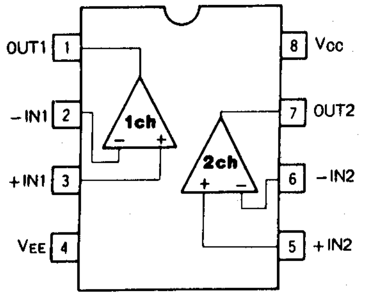
■ M5201L 【MITSUBISHI】
(Switch Op Amp.)

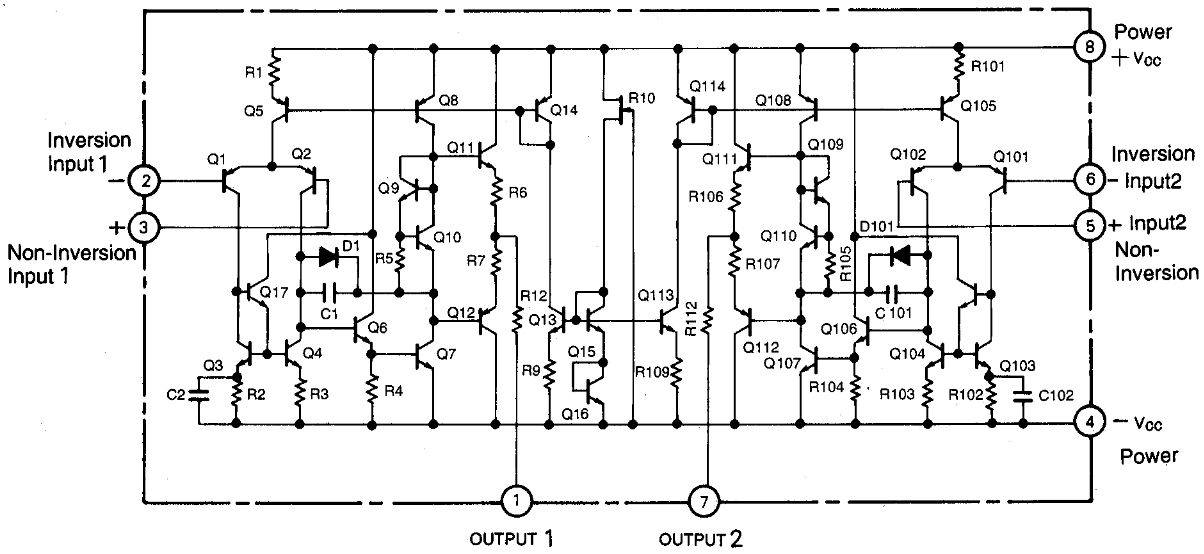

8 Vcc (+)
7 INPUT B (+)
6 INPUT B (–)
5 OUTPUT
4 Vcc (–)
3 INPUT A (–)
2 INPUT A (+)
1 SW CTL


A
INVERSION INPUT (–)
NON-INVERSION INPUT (+)
B
INVERSION INPUT (–)
NON-INVERSION INPUT (+)
3
2
6
7
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
A
B
A2
10k
Q9
Q10
SWITCH CIRCUIT
Di × 6
Di × 4
8 + Vcc
4 - Vcc
5 OUTPUT
1 CONTROL

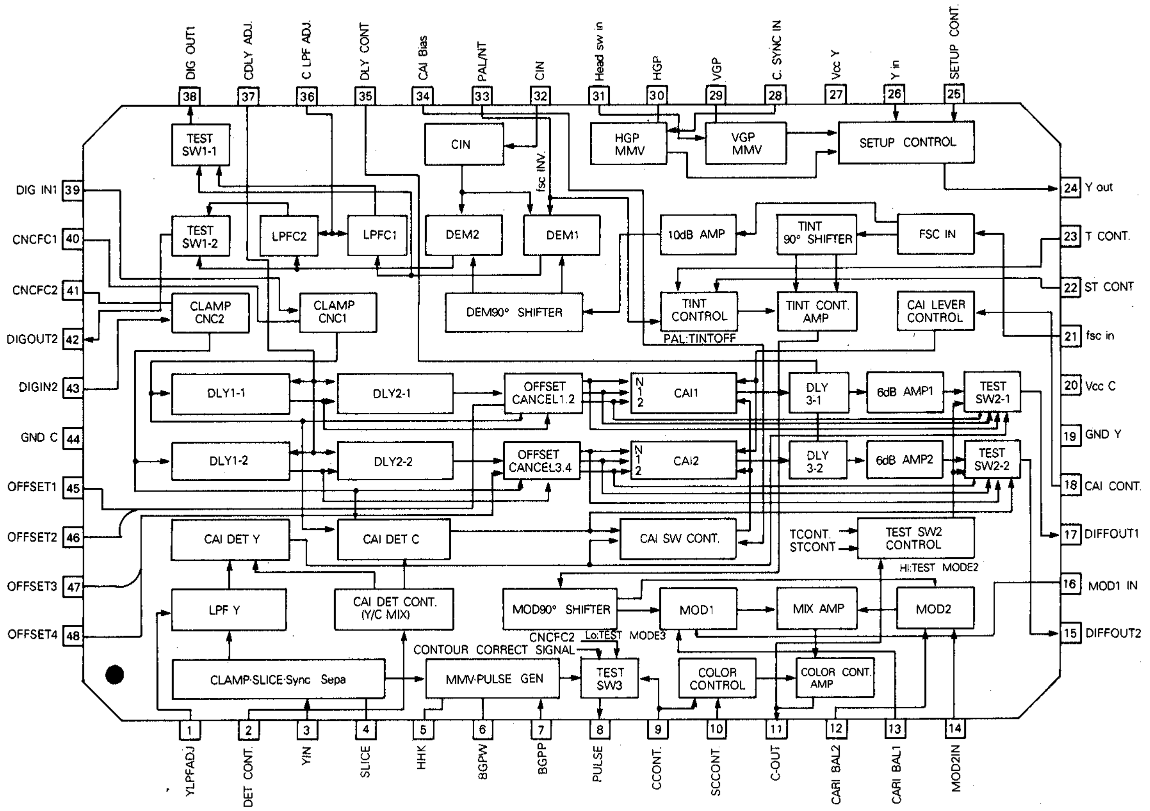
AP 【MITSUBISHI】
ence M5218AFP-XE1.)

■ M5220P 【MITSUBISHI】
(Dual Op.Amp)

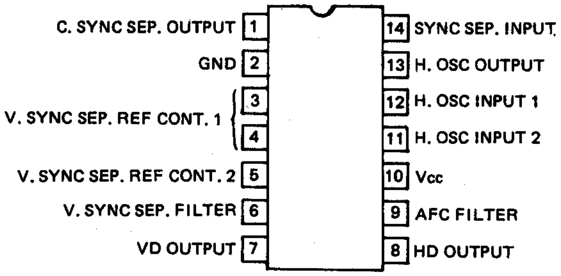

OUT1 1
–IN1 2
+IN1 3
VEE 4
8 Vcc
7 OUT2
6 –IN2
5 +IN2
1ch
2ch
–
+

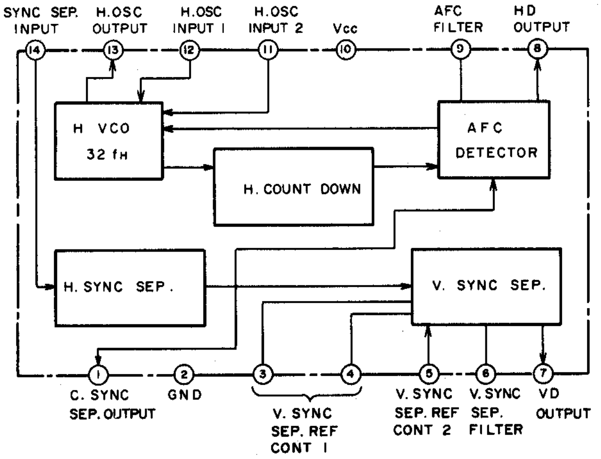

Power +Vcc 8
Inversion Input 1 – 2
+ 3 Non-Inversion Input 1
6 – Input2 Inversion
5 + Input2 Non-Inversion
4 – Vcc Power
R1
Q5
Q1
Q2
Q8
Q14
R10
Q114
Q108
R101
Q105
Q11
Q9
R6
Q10
R5
R7
D1
Q17
C1
Q6
Q12
R12
Q13
Q113
R112
Q3
Q4
Q7
C2
R2
R3
R4
R9
Q15
Q16
R109
Q111
Q109
R106
Q110
R107
R105
D101
Q102
Q101
C 101
Q106
Q112
Q107
Q104
Q103
R104
R103
R102
C102
1 OUTPUT 1
7 OUTPUT 2

■ M52350GP 【MITSUBISHI】
(Color Signal Processer)

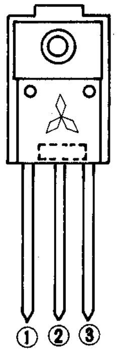

38 DIG OUT1
37 CDLY ADJ.
36 C LPF ADJ.
35 DLY CONT
34 CAI Bias
33 PAL/NT
32 CIN
31 Head sw in
30 HGP
29 VGP
28 C. SYNC IN
27 Vcc Y
26 Y in
25 SETUP CONT.
39 DIG IN1
40 CNCFC1
41 CNCFC2
42 DIGOUT2
43 DIGIN2
44 GND C
45 OFFSET1
46 OFFSET2
47 OFFSET3
48 OFFSET4
24 Y out
23 T CONT.
22 ST CONT
21 fsc in
20 Vcc C
19 GND Y
18 CAI CONT.
17 DIFFOUT1
16 MOD1 IN
15 DIFFOUT2
1 YLPFADJ
2 DET CONT.
3 YIN
4 SLICE
5 HHK
6 BGPW
7 BGPP
8 PULSE
9 CCONT.
10 SCCONT
11 C-OUT
12 CARI BAL2
13 CARI BAL1
14 MOD2IN
TEST SW1-1
TEST SW1-2
CIN
HGP MMV
VGP MMV
SETUP CONTROL
fsc INV.
LPFC2
LPFC1
DEM2
DEM1
10dB AMP
TINT 90° SHIFTER
FSC IN
CLAMP CNC2
CLAMP CNC1
DEM90° SHIFTER
TINT CONTROL
TINT CONT. AMP
CAI LEVER CONTROL
PAL:TINTOFF
DLY1-1
DLY2-1
OFFSET CANCEL1.2
N 1/2
CAI1
DLY 3-1
6dB AMP1
TEST SW2-1
DLY1-2
DLY2-2
OFFSET CANCEL3.4
N 1/2
CAI2
DLY 3-2
6dB AMP2
TEST SW2-2
CAI DET Y
CAI DET C
CAI SW CONT.
TCONT.
STCONT
TEST SW2 CONTROL
Hi:TEST MODE2
LPF Y
CAI DET CONT. (Y/C MIX)
MOD90° SHIFTER
MOD1
MIX AMP
MOD2
CNCFC2 Lo:TEST MODE3
CONTOUR CORRECT SIGNAL
CLAMP·SLICE·Sync Sepa
MMV·PULSE GEN
TEST SW3
COLOR CONTROL
COLOR CONT. AMP

■ M52684AP 【MITSUBISHI】
(SYNC Separator and AFC)

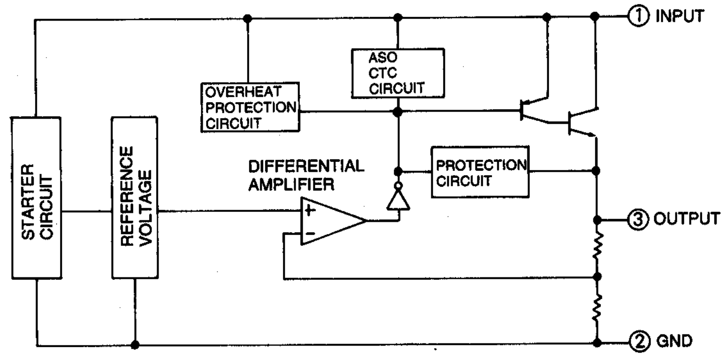

C. SYNC SEP. OUTPUT 1
GND 2
V. SYNC SEP. REF CONT. 1 3 4
V. SYNC SEP. REF CONT. 2 5
V. SYNC SEP. FILTER 6
VD OUTPUT 7
14 SYNC SEP. INPUT
13 H. OSC OUTPUT
12 H. OSC INPUT 1
11 H. OSC INPUT 2
10 Vcc
9 AFC FILTER
8 HD OUTPUT


SYNC SEP. INPUT
H. OSC OUTPUT
H. OSC INPUT 1
H. OSC INPUT 2
Vcc
AFC FILTER
HD OUTPUT
⑭
⑬
⑫
⑪
⑩
⑨
⑧
H VCO 32 fH
AFC DETECTOR
H. COUNT DOWN
H. SYNC SEP.
V. SYNC SEP.
①
②
③
④
⑤
⑥
⑦
C. SYNC SEP. OUTPUT
GND
V. SYNC SEP. REF CONT I
V. SYNC SEP. REF CONT 2
V. SYNC SEP. FILTER
VD OUTPUT

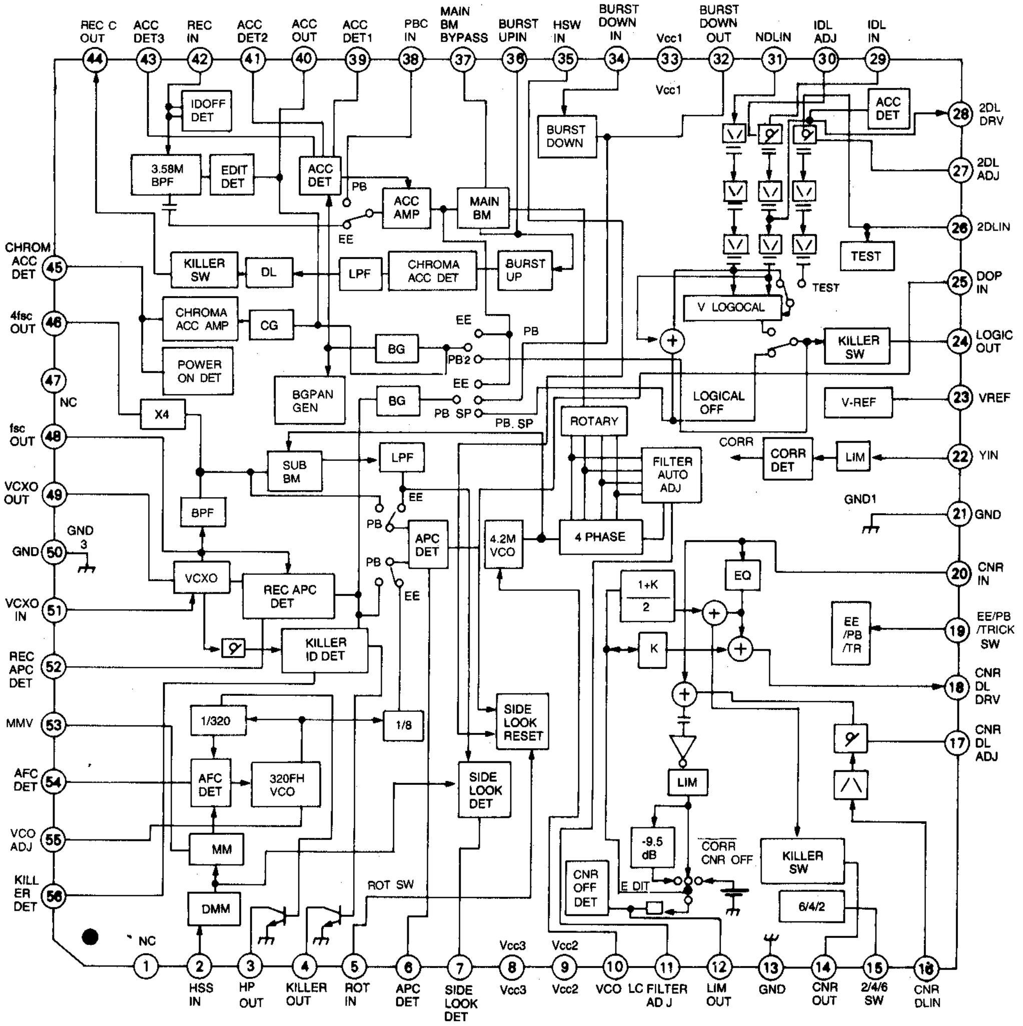
■ M5278D05 【MITSUBISHI】
(3 Terminal Positive Voltage Regulator (+5V))



① INPUT
② GND
③ OUTPUT


① INPUT
OVERHEAT PROTECTION CIRCUIT
ASO CTC CIRCUIT
STARTER CIRCUIT
REFERENCE VOLTAGE
DIFFERENTIAL AMPLIFIER
+
-
PROTECTION CIRCUIT
③ OUTPUT
② GND

■ M52366FP 【MITSUBISHI】
(Color Signal Processer)

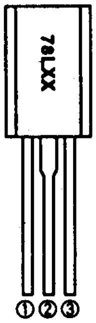

REC C OUT 44
ACC DET3 43
REC IN 42
ACC DET2 41
ACC OUT 40
ACC DET1 39
PBC IN 38
MAIN BM BYPASS 37
BURST UPIN 36
HSW IN 35
BURST DOWN IN 34
Vcc1 33
BURST DOWN OUT 32
NDLIN 31
IDL ADJ 30
IDL IN 29
28 2DL DRV
27 2DL ADJ
26 2DLIN
25 DOP IN
24 LOGIC OUT
23 VREF
22 YIN
21 GND
20 CNR IN
19 EE/PB /TRICK SW
18 CNR DL DRV
17 CNR DL ADJ
1 NC
2 HSS IN
3 HP OUT
4 KILLER OUT
5 ROT IN
6 APC DET
7 SIDE LOOK DET
8 Vcc3
9 Vcc2
10 VCO LC
11 FILTER AD J
12 LIM OUT
13 GND
14 CNR OUT
15 2/4/6 SW
16 CNR DLIN
CHROM ACC DET 45
4fsc OUT 46
47 NC
fsc OUT 48
VCXO OUT 49
GND 50
VCXO IN 51
REC APC DET 52
MMV 53
AFC DET 54
VCO ADJ 55
KILLER DET 56
NC
GND 3
Vcc1
IDOFF DET
3.58M BPF
EDIT DET
ACC DET
PB
ACC AMP
MAIN BM
EE
BURST DOWN
ACC DET
TEST
TEST
KILLER SW
DL
LPF
CHROMA ACC DET
BURST UP
CHROMA ACC AMP
CG
BG
EE
PB
PB2
POWER ON DET
BGPAN GEN
BG
EE
PB SP
PB. SP
V LOGOCAL
KILLER SW
LOGICAL OFF
V-REF
X4
ROTARY
CORR
CORR DET
LIM
SUB BM
LPF
EE
FILTER AUTO ADJ
GND1
BPF
PB
APC DET
4.2M VCO
4 PHASE
PB
EE
VCXO
REC APC DET
EQ
1+K
2
K
EE /PB /TR
KILLER ID DET
1/320
1/8
SIDE LOOK RESET
AFC DET
320FH VCO
SIDE LOOK DET
LIM
MM
-9.5 dB
CORR
CNR OFF
KILLER SW
CNR OFF DET
E DIT
6/4/2
ROT SW
DMM
Vcc3
Vcc2

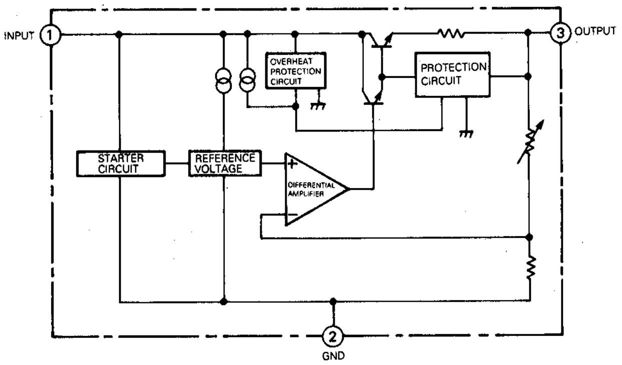
■ M5278D09 【MITSUBISHI】
(Reference M5278D05.)

■ M5278L09 【MITSUBISHI】
(Reference M5278L05.)

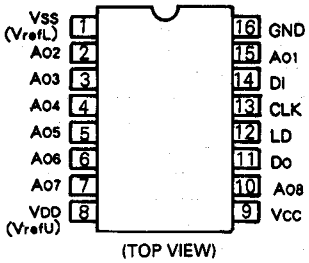
■ M5278L05 【MITSUBISHI】
(3 Terminal Negative Voltage Regulator (−5V))

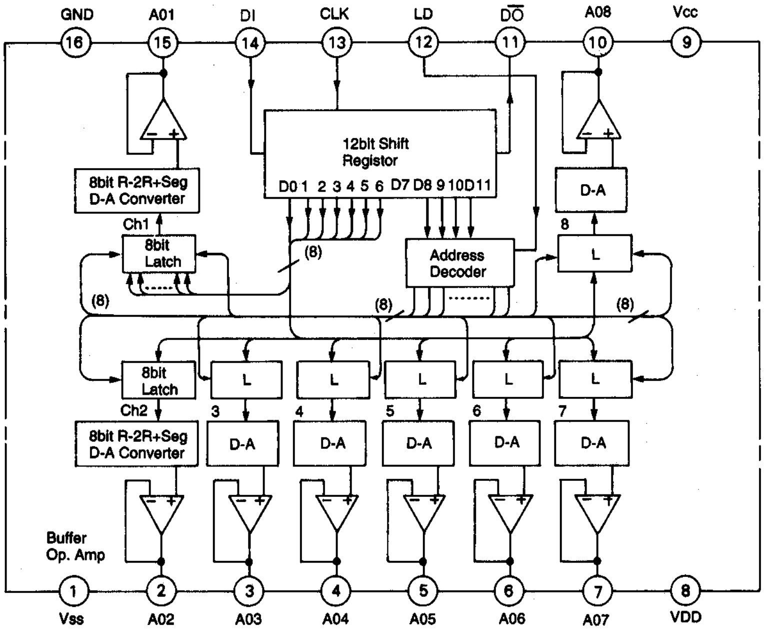
L TYPE




INPUT 1
3 OUTPUT
OVERHEAT PROTECTION CIRCUIT
PROTECTION CIRCUIT
STARTER CIRCUIT
REFERENCE VOLTAGE
DIFFERENTIAL AMPLIFIER
2 GND

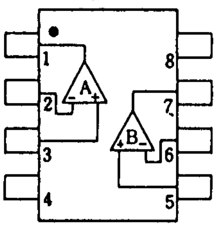
■ M62353GP 【MITSUBISHI】
(8-Bit 8-Channel D/A Converter)


Vss (VrefL) 1
AO2 2
AO3 3
AO4 4
AO5 5
AO6 6
AO7 7
VDD (VrefU) 8
16 GND
15 AO1
14 DI
13 CLK
12 LD
11 DO
10 AO8
9 Vcc
(TOP VIEW)

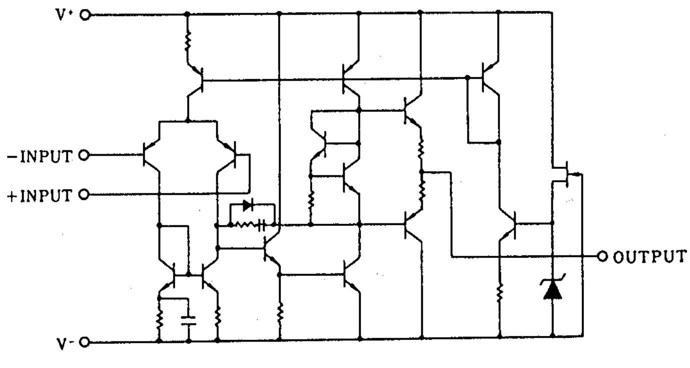

GND 16
AO1 15
DI 14
CLK 13
LD 12
D̄O̅ 11
AO8 10
Vcc 9
12bit Shift Register
D0 1 2 3 4 5 6 D7 D8 9 10 D11
8bit R-2R+Seg D-A Converter
Ch1
8bit Latch
(8)
Address Decoder
D-A
8
L
8bit Latch
Ch2
L L L L L
3 4 5 6 7
D-A D-A D-A D-A D-A
Buffer Op. Amp
1 Vss
2 AO2
3 AO3
4 AO4
5 AO5
6 AO6
7 AO7
8 VDD

■ NJM2068MD 【JRC】
(Dual Low-Noise Op.Amp)

(Top View)

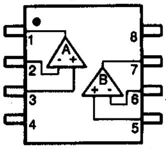

1
2
3
4
5
6
7
8
A
B

1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. V⁻
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V⁺

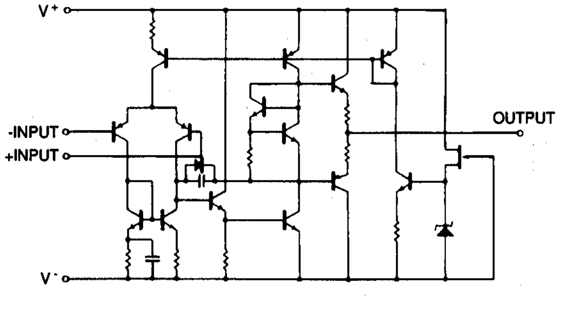

V⁺
−INPUT
+INPUT
OUTPUT
V⁻

■ NJM4560D 【JRC】
(Dual Op.Amp)

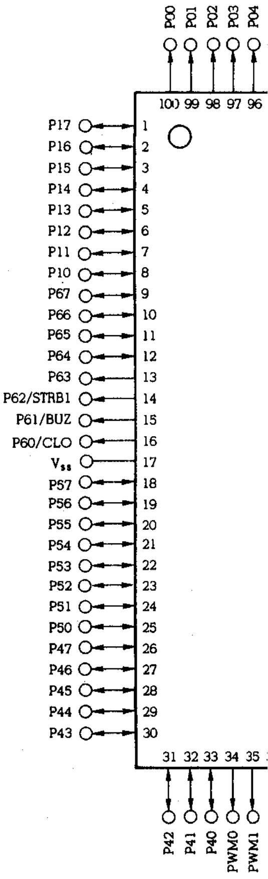
(Top View)


1
2
3
4
5
6
7
8
A
B

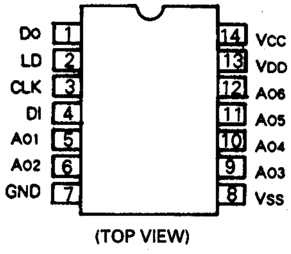
1. A OUTPUT
2. A−INPUT
3. A+INPUT
4. V⁻
5. B+INPUT
6. B−INPUT
7. B OUTPUT
8. V⁺

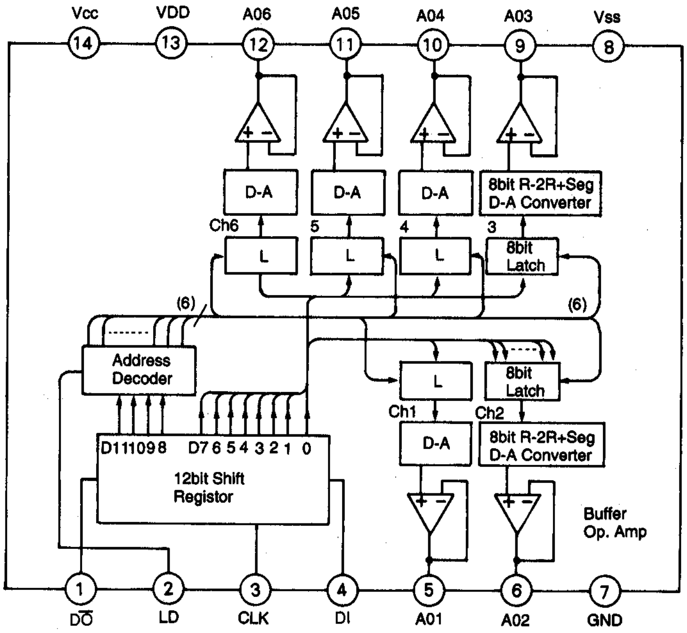

V⁺
-INPUT
+INPUT
OUTPUT
V⁻

■ SC
(8

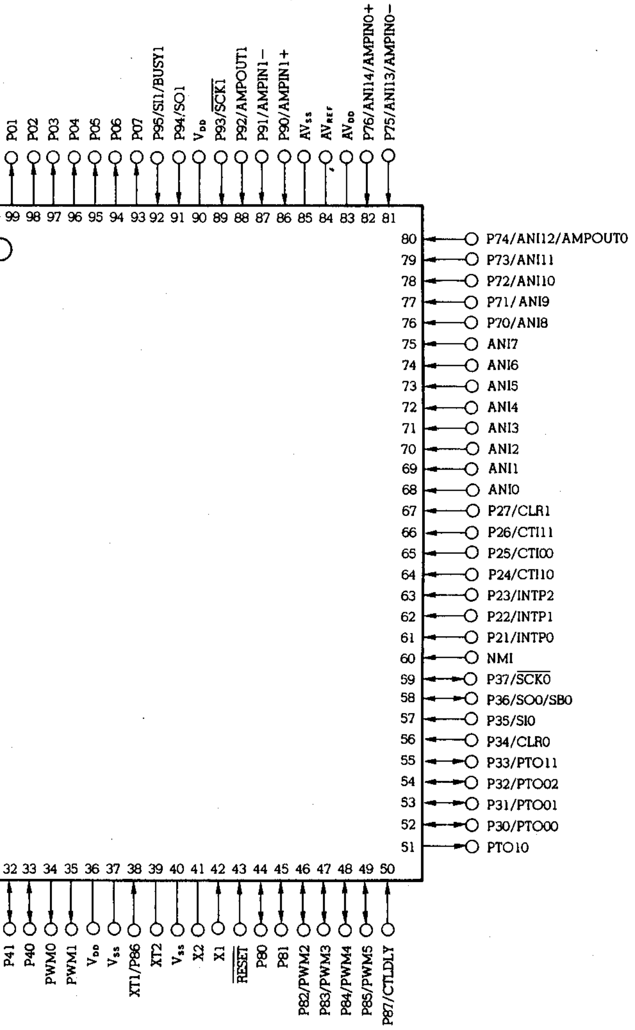

P00 P01 P02 P03 P04
100 99 98 97 96
P17 1
P16 2
P15 3
P14 4
P13 5
P12 6
P11 7
P10 8
P67 9
P66 10
P65 11
P64 12
P63 13
P62/STRB1 14
P61/BUZ 15
P60/CLO 16
Vss 17
P57 18
P56 19
P55 20
P54 21
P53 22
P52 23
P51 24
P50 25
P47 26
P46 27
P45 28
P44 29
P43 30
31 32 33 34 35
P42 P41 P40 PWM0 PWM1

■ M62354FP 【MITSUBISHI】
(8-Bit 6-Channel D/A Converter)


DO 1
LD 2
CLK 3
DI 4
AO1 5
AO2 6
GND 7
14 VCC
13 VDD
12 AO6
11 AO5
10 AO4
9 AO3
8 VSS
(TOP VIEW)

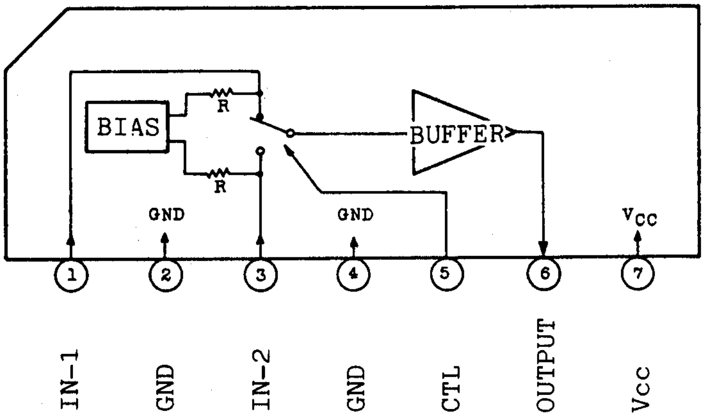

Vcc 14
VDD 13
A06 12
A05 11
A04 10
A03 9
Vss 8
D-A
8bit R-2R+Seg D-A Converter
Ch6
5
4
3
L
8bit Latch
(6)
Address Decoder
D11 10 9 8 D7 6 5 4 3 2 1 0
12bit Shift Registor
Ch1
Ch2
Buffer Op. Amp
1 DO
2 LD
3 CLK
4 DI
5 A01
6 A02
7 GND

■ SC78148GF-026 【JVC】
(8 Bit Micro Computer)

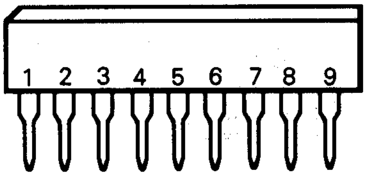

P01 99
P02 98
P03 97
P04 96
P05 95
P06 94
P07 93
P95/SI1/BUSY1 92
P94/SO1 91
V_DD 90
P93/SCK1 89
P92/AMPOUT1 88
P91/AMPIN1− 87
P90/AMPIN1+ 86
AV_SS 85
AV_REF 84
AV_DD 83
P76/ANI14/AMPIN0+ 82
P75/ANI13/AMPIN0− 81
80 P74/ANI12/AMPOUT0
79 P73/ANI11
78 P72/ANI10
77 P71/ANI9
76 P70/ANI8
75 ANI7
74 ANI6
73 ANI5
72 ANI4
71 ANI3
70 ANI2
69 ANI1
68 ANI0
67 P27/CLR1
66 P26/CTI11
65 P25/CTI00
64 P24/CTI10
63 P23/INTP2
62 P22/INTP1
61 P21/INTP0
60 NMI
59 P37/SCK0
58 P36/SO0/SB0
57 P35/SI0
56 P34/CLR0
55 P33/PTO11
54 P32/PTO02
53 P31/PTO01
52 P30/PTO00
51 PTO10
32 P41
33 P40
34 PWM0
35 PWM1
36 V_DD
37 V_SS
38 XT1/P86
39 XT2
40 V_SS
41 X2
42 X1
43 RESET
44 P80
45 P81
46 P82/PWM2
47 P83/PWM3
48 P84/PWM4
49 P85/PWM5
50 P87/CTLDLY

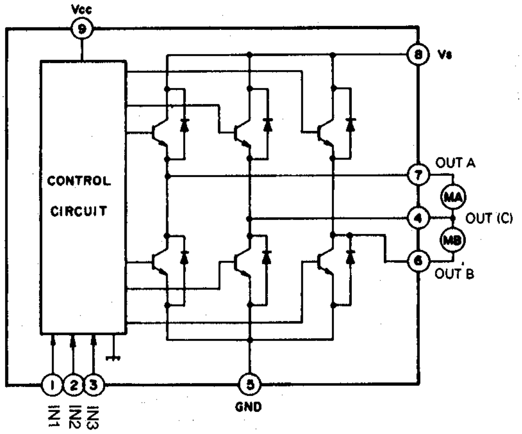
■ PGD30620C-11-7 【JVC】
■ PGD30620C-17-1 【JVC】
(Reference M27C512-15F1)

■ TA7347P 【TOSHIBA】
(2-Input Switch)


BIAS
R
R
BUFFER
GND
GND
Vcc
1 IN-1
2 GND
3 IN-2
4 GND
5 CTL
6 OUTPUT
7 Vcc

■ TA8405S 〔TOSHIBA〕
(DC Motor Driver)



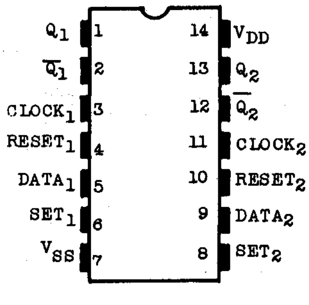

Vcc
9
8 Vs
CONTROL
CIRCUIT
7 OUT A
MA
4 OUT (C)
MB
6 OUT B
1 2 3
IN1 IN2 IN3
5
GND

TRUTH TABLE

INPUT			INPUT			MODE	
IN 1	IN 2	IN 3	OUT (C)	OUT A	OUT B	MA	MB
0	0	1/0	*	*	*	STOP	STOP
1	0	0	H	L	*	CW/CCW	STOP
1	0	1	L	H	*	CCW/CW	STOP
0	1	0	H	*	L	STOP	CW/CCW
0	1	1	L	*	H	STOP	CCW/CW
1	1	1/0	L	L	L	BRAKE	BRAKE

*: High Impedance

■ TC4013BF 〔TC
(Dual D-Type F


Q_1 1
$\overline{Q}_1$ 2
$CLOCK_1$ 3
$RESET_1$ 4
$DATA_1$ 5
SET_1 6
V_{SS} 7
14 V_{DD}
13 Q_2
12 $\overline{Q}_2$
11 $CLOCK_2$
10 $RESET_2$
9 $DATA_2$
8 SET_2

(TOP VIEW)

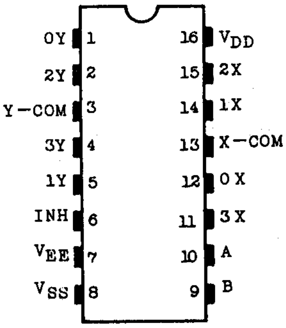
BL

TRUTH TABLE

INPUTS			
RESET	SET	DATA	CLOC
L	H	✱	✱
H	L	✱	✱
H	H	✱	✱
L	L	L	↑
L	L	H	↑
L	L	✱	↓

✱ : Don't Care
△ : Level Change
• : No Change

■ TC4052BF 〔TOSHIBA〕
(Dual 4 Channel Analog Multiplexers/ Demultiplexers)


0Y 1
2Y 2
Y-COM 3
3Y 4
1Y 5
INH 6
V_{EE} 7
V_{SS} 8
16 V_{DD}
15 2X
14 1X
13 X-COM
12 0X
11 3X
10 A
9 B

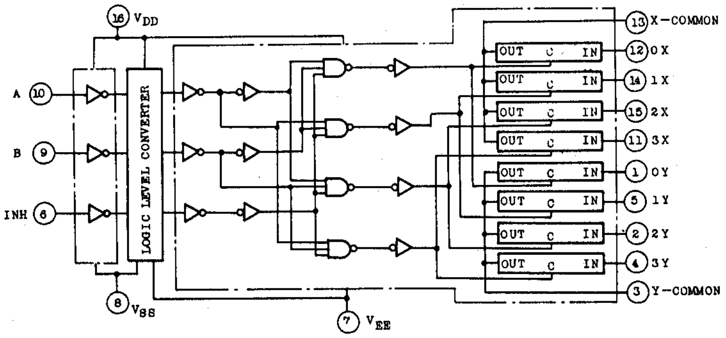
(TOP VIEW)

TRUTH TABLE

CONTROL INPUTS			"ON" CHANNEL
INHIBIT	B	A	TC4052BP TC4052BF
L	L	L	0X、0Y
L	L	H	1X、1Y
L	H	L	2X、2Y
L	H	H	3X、3Y
L	L	L	—
L	L	H	—
L	H	L	—
L	H	H	—
H	✱	✱	NONE

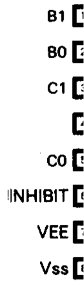
✱ Don' t Care

LOGIC DIAGRAM


16 V_{DD}
A 10
B 9
INH 6
LOGIC LEVEL CONVERTER
8 V_{SS}
7 V_{EE}
OUT C IN
13 X-COMMON
12 0X
14 1X
15 2X
11 3X
1 0Y
5 1Y
2 2Y
4 3Y
3 Y-COMMON

■ TC4052BP 〔TOSHIBA〕
(Reference TC4052BF.)

■ TC4053BF
(Triple 2 Cl
Demultiplex

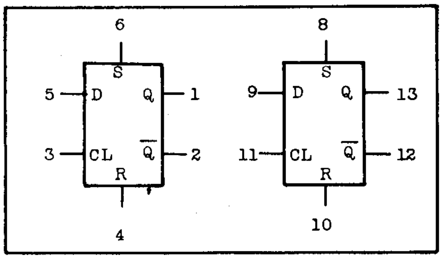

B1
B0
C1
C0
INHIBIT
VEE
Vss

TRUTH

CON
INHIBIT
L
L
L
L
L
L
L
L
H
* Dor

F 【TOSHIBA】
Type Flip Flop)

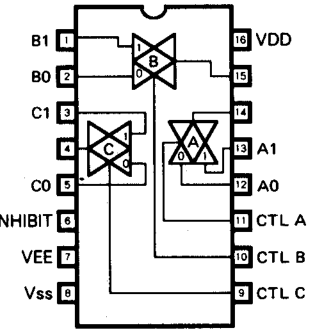
BLOCK DIAGRAM


6
8
S
D
Q
CL
Q̄
R
5
1
3
2
4
9
13
11
12
10

	OUTPUTS	
CLOCK △	Qn+1	Q̄n+1
*	H	L
*	L	H
*	H	H
↑	L	H
↑	H	L
↓	Qn*	Q̄n*

e
nge

53BF 【TOSHIBA】
2 Channel Analog Multiplexers/ ltiplexers)

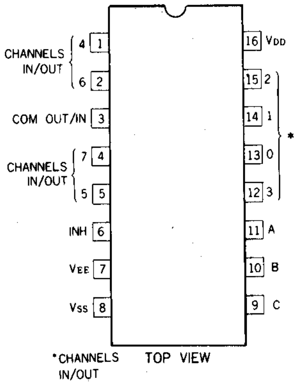

B1
B0
C1
C0
NHIBIT
VEE
Vss
VDD
A1
A0
CTL A
CTL B
CTL C
B
C
A

(TOP VIEW)

RUTH TABLE

CONTROL INPUTS				"ON" CHANNEL
NHIBIT	C△	B	A	4053BP 4053BF
L	L	L	L	0X, 0Y, 0Z
L	L	L	H	1X, 0Y,0Z
L	L	H	L	0X, 1Y, 0Z
L	L	H	H	1X, 1Y, 0Z
L	H	L	L	0X, 0Y, 1Z
L	H	L	H	1X, 0Y, 1Z
L	H	H	L	0X, 1Y, 1Z
L	H	H	H	1X, 1Y, 1Z
H	*	*	*	NOTE
* Don't Care,				

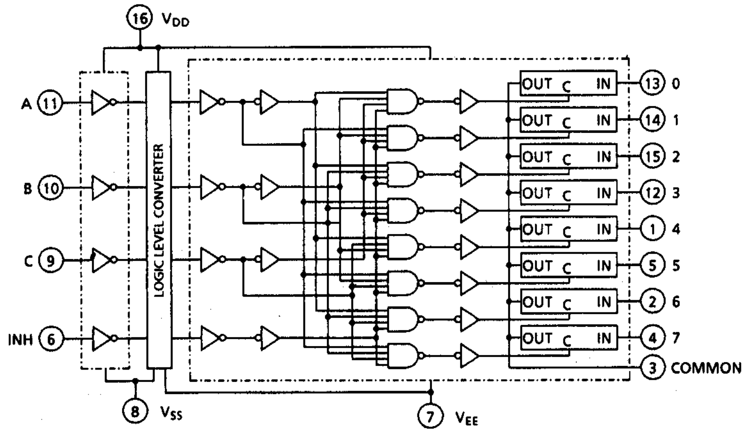
■ TC4051BF 【TOSHIBA】
(Single 8 Channel Analog Multiplexers/ Demultiplexers)


CHANNELS IN/OUT
4
6
COM OUT/IN
CHANNELS IN/OUT
7
5
INH
VEE
Vss
VDD
2
1
0
3
A
B
C
*
*CHANNELS IN/OUT
TOP VIEW

TRUTH TABLE

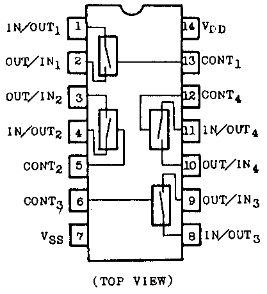
CONTROL INPUTS				"ON" CHANNEL
INHIBIT	C△	B	A	4051
L	L	L	L	0
L	L	L	H	1
L	L	H	L	2
L	L	H	H	3
L	H	L	L	4
L	H	L	H	5
L	H	H	L	6
L	H	H	H	7
H	*	*	*	NONE
* Don' t Care.				

LOGIC DIAGRAM


16 VDD
A 11
B 10
C 9
INH 6
LOGIC LEVEL CONVERTER
OUT C IN
13 0
14 1
15 2
12 3
1 4
5 5
2 6
4 7
3 COMMON
8 Vss
7 VEE

■ TC4053BP 【TOSHIBA】
(Reference TC4053BF.)

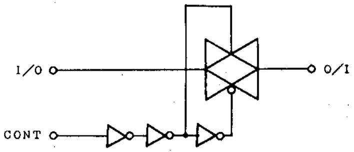
■ TC4066BP 【TOSHIBA】
(Quad Bilateral Switch)


IN/OUT1
OUT/IN1
OUT/IN2
IN/OUT2
CONT2
CONT3
VSS
VDD
CONT1
CONT4
IN/OUT4
OUT/IN4
OUT/IN3
IN/OUT3
(TOP VIEW)

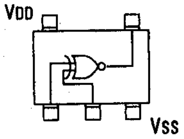
TRUTH TABLE

CONTROL	Impedance Between IN/OUT-OUT/IN *
H	$0.5\sim5\times10^2\Omega$
L	$>10^9\Omega$

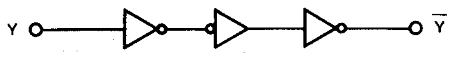
LOGIC DIAGRAM

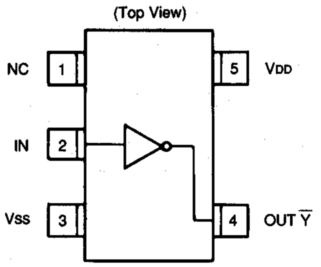


■ TC4S30F 【TOSHIBA】
(Single Exclusive OR Gate)

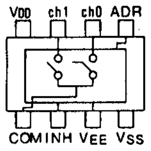


■ TC4S69F 【TOSHIBA】
(Inverter Gate)

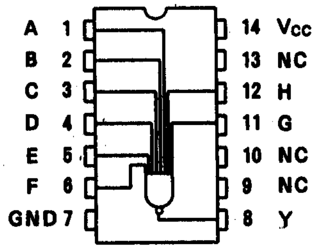

Y
$\overline{Y}$


(Top View)
NC
1
IN
2
Vss
3
5
VDD
4
OUT $\overline{Y}$

■ TC4W53F 【TOSHIBA】
(Multiplexer)


VDD
ch1
ch0
ADR
COM
INH
VEE
Vss

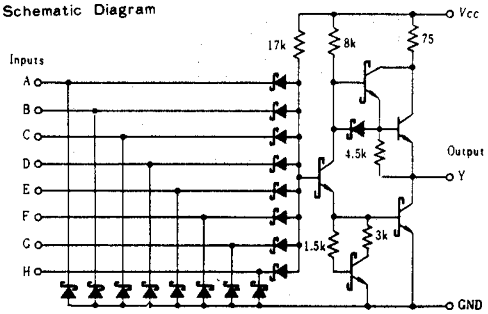
■ TC74HC30AF 【TOSHIBA】
(8-Input NAND Gates)


A 1
B 2
C 3
D 4
E 5
F 6
GND 7
14 Vcc
13 NC
12 H
11 G
10 NC
9 NC
8 Y

(TOP VIEW)

NC:No Connection

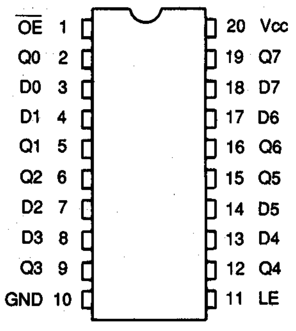
Schematic Diagram


Vcc
17k
8k
75
Inputs
A
B
C
D
E
F
G
H
4.5k
Output
Y
1.5k
3k
GND

TRUE Table

INPUTS								OUTPUTS
A	B	C	D	E	F	G	H	
H	H	H	H	H	H	H	H	L
L	X	X	X	X	X	X	X	H
X	L	X	X	X	X	X	X	H
X	X	L	X	X	X	X	X	H
X	X	X	L	X	X	X	X	H
X	X	X	X	L	X	X	X	H
X	X	X	X	X	L	X	X	H
X	X	X	X	X	X	L	X	H

■ TC74HC373AF 【TOSHIBA】
(Octal D-Type Latch With NON-Inverted 3-State Output)

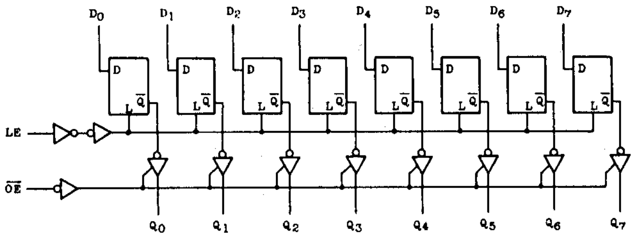

$\overline{OE}$ 1
Q0 2
D0 3
D1 4
Q1 5
Q2 6
D2 7
D3 8
Q3 9
GND 10
20 Vcc
19 Q7
18 D7
17 D6
16 Q6
15 Q5
14 D5
13 D4
12 Q4
11 LE

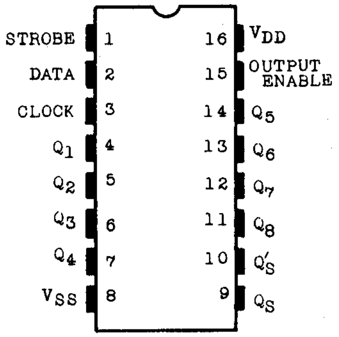
(Top View)

TRUE Table

INPUTS			OUTPUTS
$\overline{OE}$	LE	D	
H	X	X	Z
L	L	X	Q_n
L	H	L	L
L	H	H	H

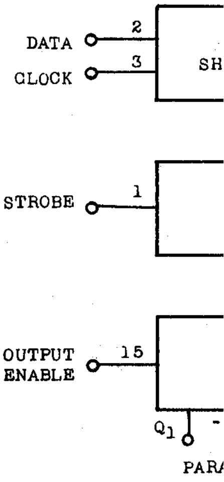
X : Don't Care
Z : Hi impedance
Qn : Q output level before the LE become "L"


D_0
D_1
D_2
D_3
D_4
D_5
D_6
D_7
D
L
$\overline{Q}$
LE
$\overline{OE}$
Q_0
Q_1
Q_2
Q_3
Q_4
Q_5
Q_6
Q_7


STROBE 1
DATA 2
CLOCK 3
Q_1 4
Q_2 5
Q_3 6
Q_4 7
V_{SS} 8
16 V_{DD}
15 OUTPUT ENABLE
14 Q_5
13 Q_6
12 Q_7
11 Q_8
10 Q'_S
9 Q_S

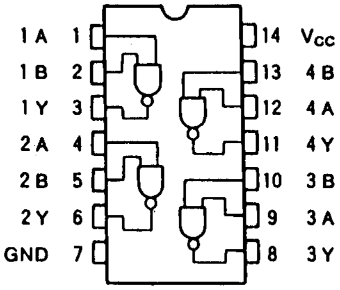
(TOP VIEW)

BLOCK DIAGRAM


DATA
2
CLOCK
3
SH
STROBE
1
OUTPUT ENABLE
15
Q_1
PAR

BA】

■ TC74HC00AF 【TOSHIBA】
(Quad 2-Input NAND Gates)

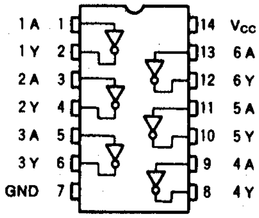

1A 1
1B 2
1Y 3
2A 4
2B 5
2Y 6
GND 7
14 Vcc
13 4B
12 4A
11 4Y
10 3B
9 3A
8 3Y

(TOP VIEW)

TRUE Table

A	B	Y
L	L	H
L	H	H
H	L	H
H	H	L

■ TC74HC04AF 【TOSHIBA】
(Hex Inverters)


1A 1
1Y 2
2A 3
2Y 4
3A 5
3Y 6
GND 7
14 Vcc
13 6A
12 6Y
11 5A
10 5Y
9 4A
8 4Y

(TOP VIEW)

■ TC74HC4094AF 【TOSHIBA】
(8 Stage Bus Compatible Shift/Store Register)

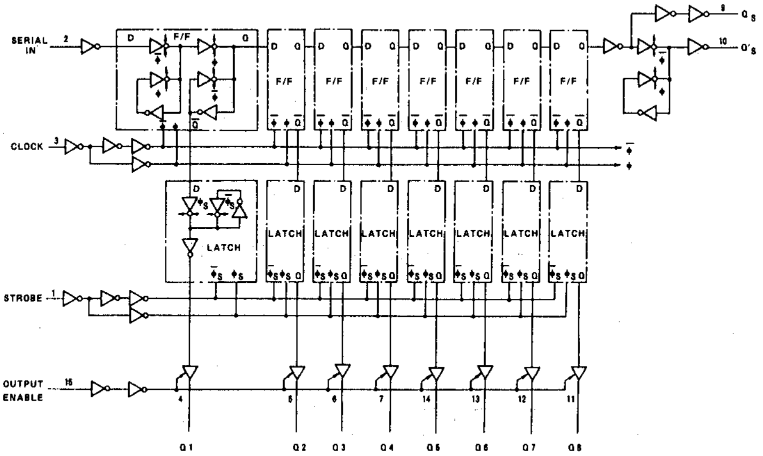
D
TPUT
NABLE

TRUTH TABLE

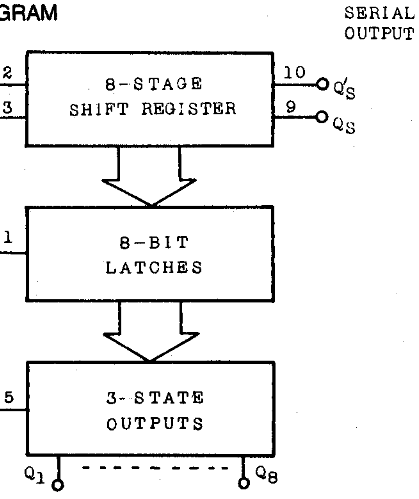
CL	OE	ST	D	PO		SO	
				Q_1	Q_n	Q_S	Q'_S
↑	H	H	L	L	Q_{n-1}	Q_7	NC
↑	H	H	H	H	Q_{n-1}	Q_7	NC
↑	H	L	*	NC	NC	Q_7	NC
↑	L	*	*	HZ	HZ	Q_7	NC
↓	H	*	*	NC	NC	NC	Q_S
↓	L	*	*	HZ	HZ	NC	Q_S

CL = Clock
OE = Output Enable
ST = Strobe
D = Data
PO = Parallel Outputs
SO = Serial Output

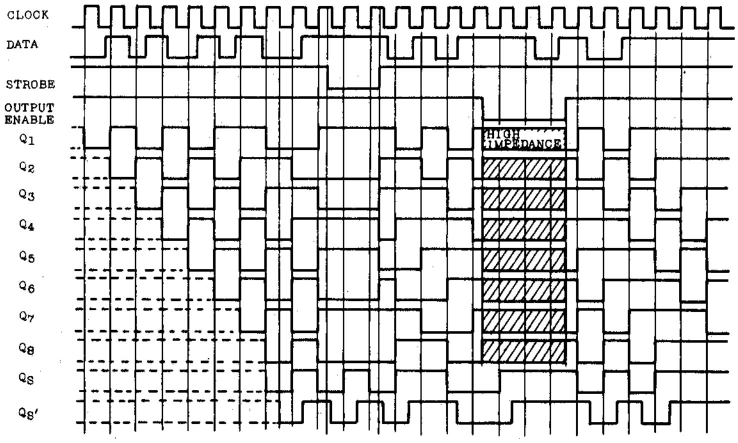
* = Don't care
NC = No Change
HZ = High Impedance


SERIAL IN 2
CLOCK 3
STROBE 1
OUTPUT ENABLE 15
D
F/F
Q
LATCH
9 Q_S
10 Q'_S
4
5
6
7
14
13
12
11
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8

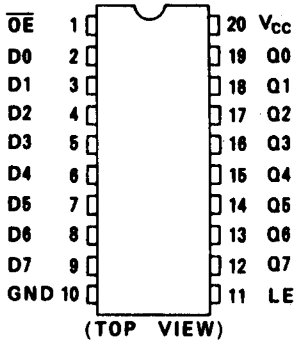
GRAM


SERIAL OUTPUT
2
3
8-STAGE SHIFT REGISTER
10 Q'_S
9 Q_S
1
8-BIT LATCHES
5
3-STATE OUTPUTS
Q_1
Q_8

PARALLEL OUTPUTS


CLOCK
DATA
STROBE
OUTPUT ENABLE
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
QS
QS'
HIGH IMPEDANCE

TC74HC573AF 【TOSHIBA】
(Octal D-Type Latch With NON-Inverted 3-State Outputs)



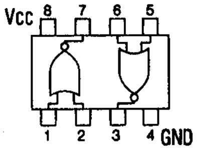
OE 1
D0 2
D1 3
D2 4
D3 5
D4 6
D5 7
D6 8
D7 9
GND 10
20 Vcc
19 Q0
18 Q1
17 Q2
16 Q3
15 Q4
14 Q5
13 Q6
12 Q7
11 LE
(TOP VIEW)

TRUE Table

INPUTS			OUTPUTS
$\overline{OE}$	LE	D	Q
H	X	X	HZ
L	L	X	Q_n
L	H	L	L
L	H	H	H

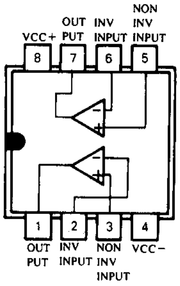
X : Don't care.
Z : Hi impedance
Q_n : Level of Q output before LE becomes "L".

TC7W02F 【TOSHIBA】
(2 Input Dual NOR Gate)



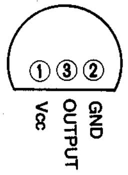
Vcc
8
7
6
5
1
2
3
4
GND

TL082CPS 【TEXAS】
(JG OR P Dual-In-Line Package)



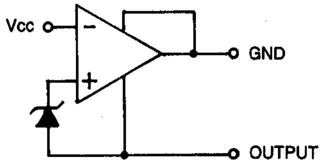
VCC+
OUT PUT
INV INPUT
NON INV INPUT
8
7
6
5
1
2
3
4
OUT PUT
INV INPUT
NON INV INPUT
VCC−

TL431CLP 【TOSHIBA】
(Voltage Regulator)



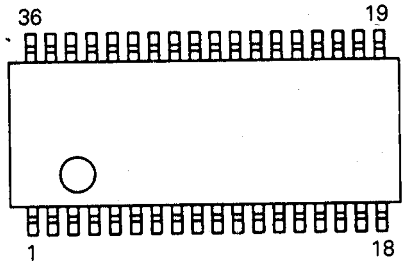
①③②
Vcc
OUTPUT
GND

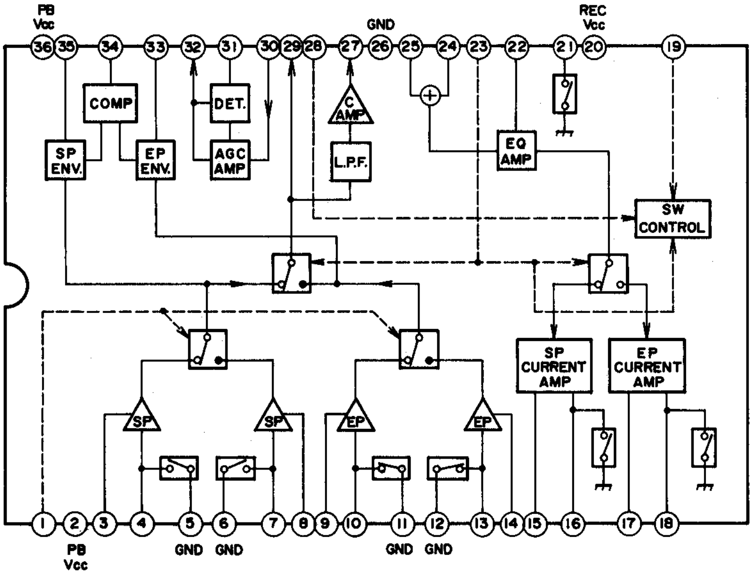
(TOP VIEW)



Vcc
GND
OUTPUT
−
+

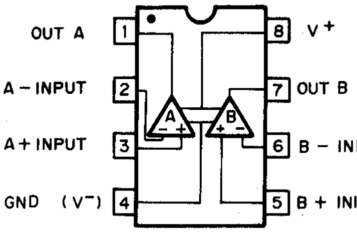
UPC2320GS 【NEC】
(Head Amp.)



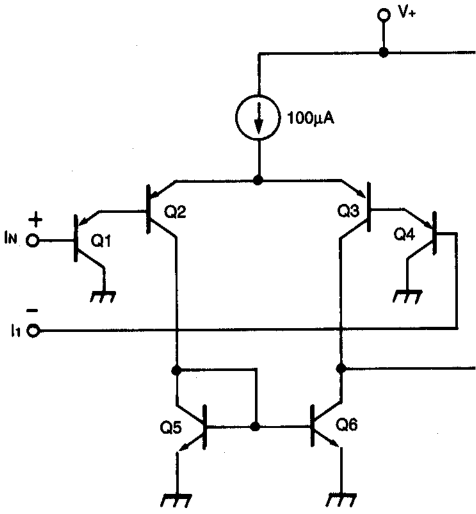


PB Vcc
GND
REC Vcc
36
35
34
33
32
31
30
29
28
27
26
25
24
23
22
21
20
19
COMP
DET.
SP ENV.
EP ENV.
AGC AMP
C AMP
L.P.F.
EQ AMP
SW CONTROL
SP CURRENT AMP
EP CURRENT AMP
SP
SP
EP
EP
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
PB Vcc
GND
GND
GND
GND

UPC393C 【NEC】
(Dual Comparator)



OUT A
A − INPUT
A + INPUT
GND (V−)
1
2
3
4
8
7
6
5
V+
OUT B
B − IN
B + IN
A
B



V+
100μA
+
IN
−
I1
Q1
Q2
Q3
Q4
Q5
Q6

]

GND

OUTPUT

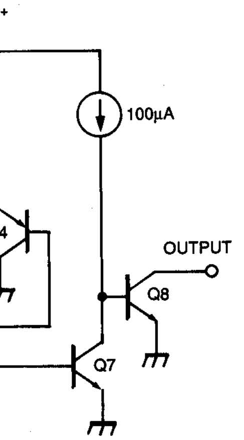
EC]
tor)

V+

OUT B

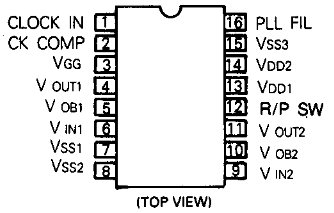
B − INPUT

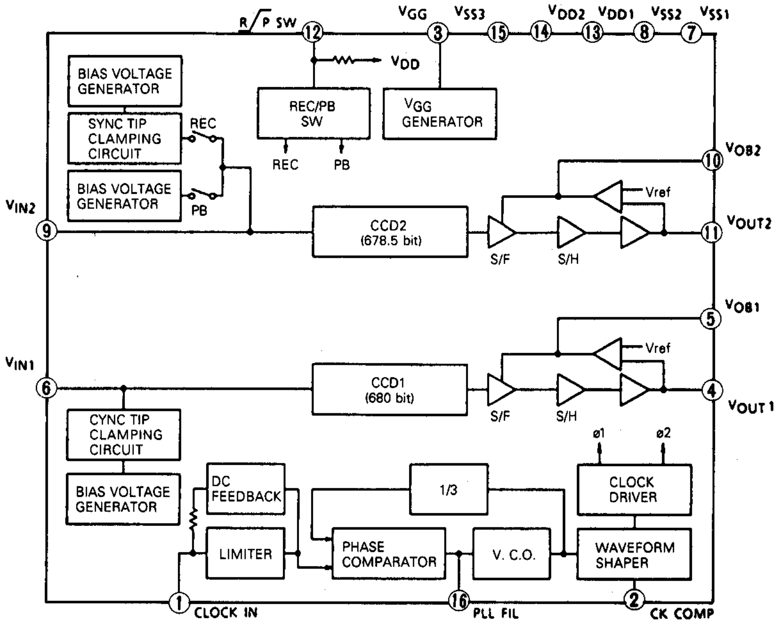
B + INPUT


+
100µA
4
OUTPUT
Q8
Q7

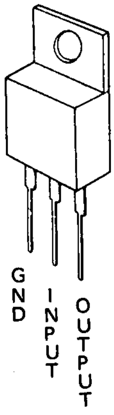
(1/2 circuit)

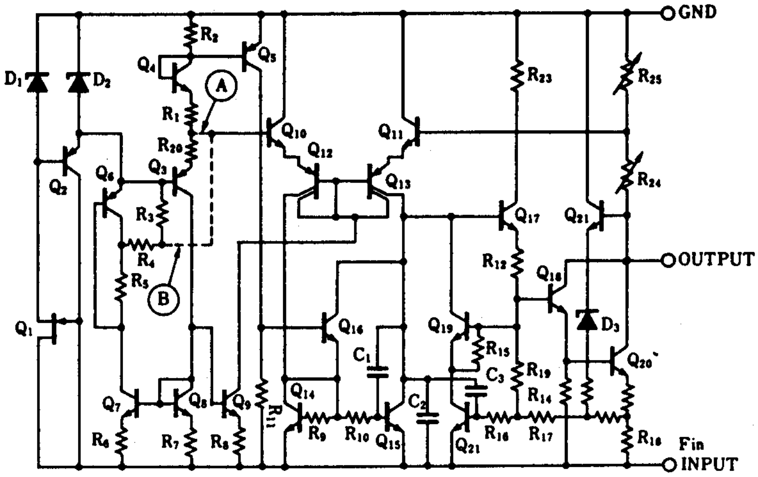
■ TL8825F-XE 【TOSHIBA】
(1H CCD Delay Line VTR For NTSC)


CLOCK IN 1
CK COMP 2
VGG 3
V OUT1 4
V OB1 5
V IN1 6
VSS1 7
VSS2 8
16 PLL FIL
15 VSS3
14 VDD2
13 VDD1
12 R/P SW
11 V OUT2
10 V OB2
9 V IN2
(TOP VIEW)


R/P SW 12
VGG 3
VSS3 15
VDD2 14
VDD1 13
VSS2 8
VSS1 7
VDD
BIAS VOLTAGE GENERATOR
SYNC TIP CLAMPING CIRCUIT
BIAS VOLTAGE GENERATOR
REC
PB
REC/PB SW
REC
PB
VGG GENERATOR
VOB2 10
Vref
VIN2 9
CCD2 (678.5 bit)
S/F
S/H
VOUT2 11
VOB1 5
Vref
VIN1 6
CCD1 (680 bit)
S/F
S/H
VOUT1 4
CYNC TIP CLAMPING CIRCUIT
BIAS VOLTAGE GENERATOR
DC FEEDBACK
LIMITER
1/3
PHASE COMPARATOR
V. C. O.
ø1
ø2
CLOCK DRIVER
WAVEFORM SHAPER
1 CLOCK IN
16 PLL FIL
2 CK COMP

■ UPC7912HF 【NEC】
(3-Terminal Negative Voltage Regulator (−12V))


GND
INPUT
OUTPUT

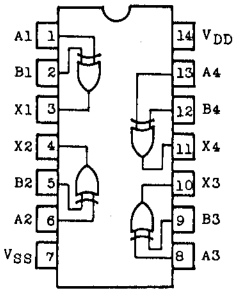

GND
OUTPUT
Fin
INPUT
D1
D2
D3
Q1
Q2
Q3
Q4
Q5
Q6
Q7
Q8
Q9
Q10
Q11
Q12
Q13
Q14
Q15
Q16
Q17
Q18
Q19
Q20
Q21
Q21
R1
R2
R3
R4
R5
R6
R7
R8
R9
R10
R11
R12
R14
R15
R16
R17
R18
R19
R20
R23
R24
R25
C1
C2
C3
A
B

−5V, −8V →Ⓐ

−12V, −15V, −18V, −24V →Ⓑ

■ UPD4013BG 【NEC】
(Reference TC4013BF.)

■ UPD4030BG 【NEC】
(Quad 2 Input Exclusive OR Gate)

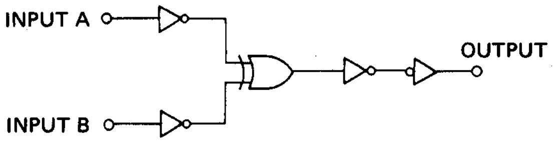

A1 1
B1 2
X1 3
X2 4
B2 5
A2 6
VSS 7
14 VDD
13 A4
12 B4
11 X4
10 X3
9 B3
8 A3

TOP VIEW

TRUTH TABLE

INPUT		OUTPUT
A	B	X
L	L	L
L	H	H
H	L	H
H	H	L

BLOCK DIAGRAM

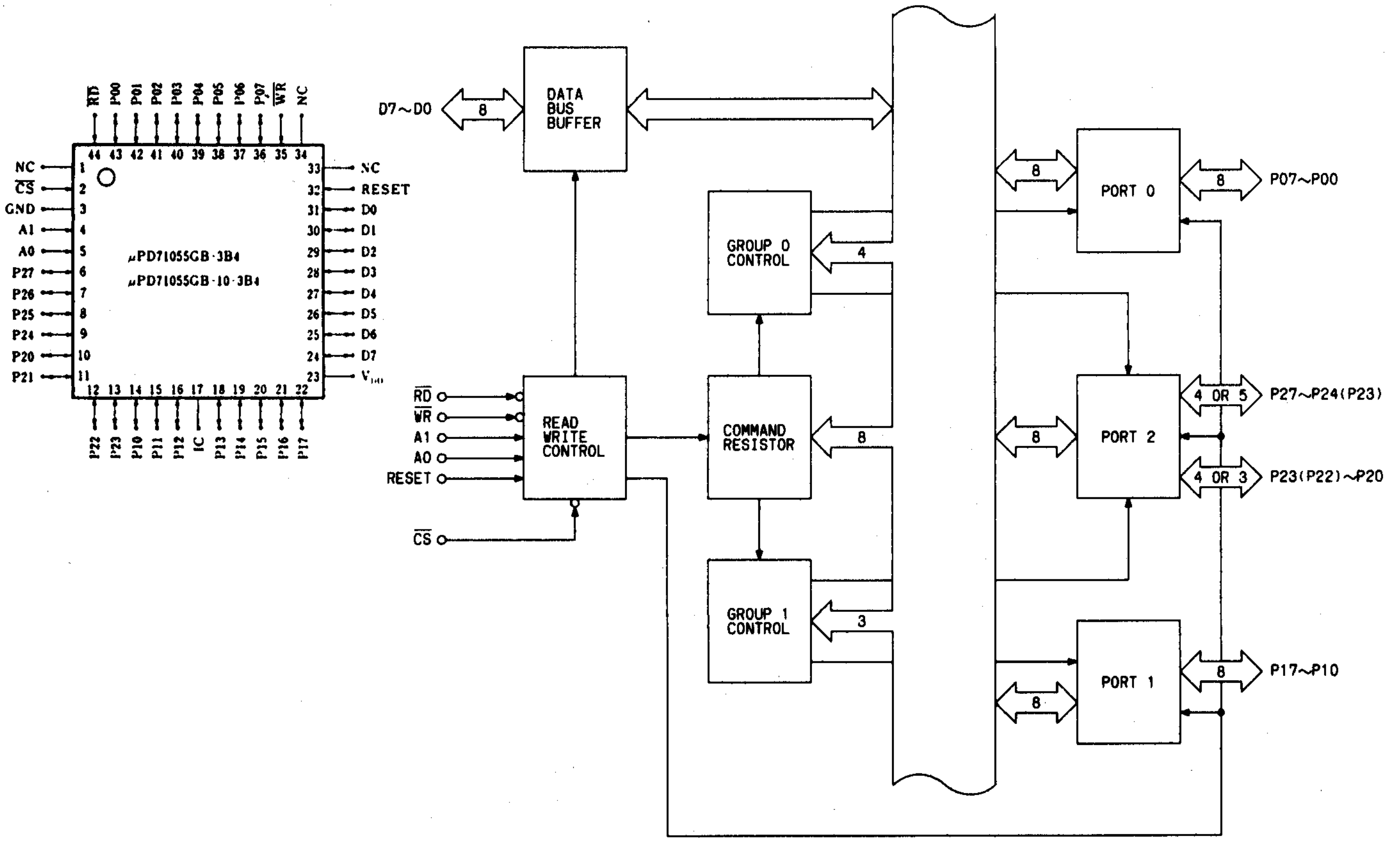

INPUT A
INPUT B
OUTPUT

■ UPD4053BG 【NEC】
(Reference TC4053BF.)

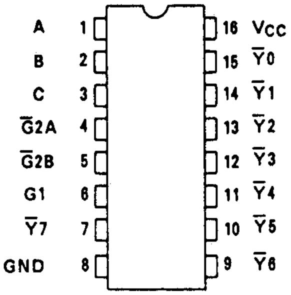
■ UPD4066BG 【NEC】
(Reference TC4066BP.)

■ UPD74HC04G 【NEC】
(Reference TC74HC04AF.)

■ UPD71055GB 【NEC】
(Parallel Input/Output Port)


$\overline{\text{RD}}$ 44
P00 43
P01 42
P02 41
P03 40
P04 39
P05 38
P06 37
P07 36
$\overline{\text{WR}}$ 35
NC 34
NC 1
$\overline{\text{CS}}$ 2
GND 3
A1 4
A0 5
P27 6
P26 7
P25 8
P24 9
P20 10
P21 11
P22 12
P23 13
P10 14
P11 15
P12 16
IC 17
P13 18
P14 19
P15 20
P16 21
P17 22
23 VDD
24 D7
25 D6
26 D5
27 D4
28 D3
29 D2
30 D1
31 D0
32 RESET
33 NC
μPD71055GB-3B4
μPD71055GB-10-3B4
D7～D0
8
DATA BUS BUFFER
GROUP 0 CONTROL
4
COMMAND RESISTOR
8
GROUP 1 CONTROL
3
$\overline{\text{RD}}$
$\overline{\text{WR}}$
A1
A0
RESET
$\overline{\text{CS}}$
READ WRITE CONTROL
8
PORT 0
8
P07～P00
8
PORT 2
4 OR 5
P27～P24(P23)
4 OR 3
P23(P22)～P20
8
PORT 1
8
P17～P10

UPD74HC138G 【NEC】
(3–Line to 8–Line Decoders/ Demultiplexers)


A 1
B 2
C 3
$\overline{\text{G}}$2A 4
$\overline{\text{G}}$2B 5
G1 6
$\overline{\text{Y}}$7 7
GND 8
16 Vcc
15 $\overline{\text{Y}}$0
14 $\overline{\text{Y}}$1
13 $\overline{\text{Y}}$2
12 $\overline{\text{Y}}$3
11 $\overline{\text{Y}}$4
10 $\overline{\text{Y}}$5
9 $\overline{\text{Y}}$6

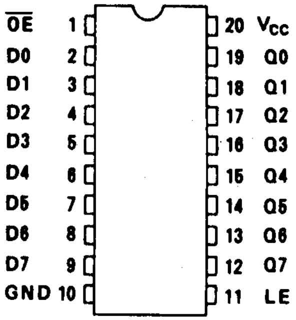
(TOP VIEW)

TRUE Table

INPUTS						OUTPUTS								SELECTED OUTPUT
ENABLE			SELECT											
G1	$\overline{\text{G}}$2A	$\overline{\text{G}}$2B	C	B	A	$\overline{\text{Y}}$0	$\overline{\text{Y}}$1	$\overline{\text{Y}}$2	$\overline{\text{Y}}$3	$\overline{\text{Y}}$4	$\overline{\text{Y}}$5	$\overline{\text{Y}}$6	$\overline{\text{Y}}$7	
L	X	X	X	X	X	H	H	H	H	H	H	H	H	NONE
X	H	X	X	X	X	H	H	H	H	H	H	H	H	NONE
X	X	H	X	X	X	H	H	H	H	H	H	H	H	NONE
H	L	L	L	L	L	L	H	H	H	H	H	H	H	$\overline{\text{Y}}$0
H	L	L	L	L	H	H	L	H	H	H	H	H	H	$\overline{\text{Y}}$1
H	L	L	L	H	L	H	H	L	H	H	H	H	H	$\overline{\text{Y}}$2
H	L	L	L	H	H	H	H	H	L	H	H	H	H	$\overline{\text{Y}}$3
H	L	L	H	L	L	H	H	H	H	L	H	H	H	$\overline{\text{Y}}$4
H	L	L	H	L	H	H	H	H	H	H	L	H	H	$\overline{\text{Y}}$5
H	L	L	H	H	L	H	H	H	H	H	H	L	H	$\overline{\text{Y}}$6
H	L	L	H	H	H	H	H	H	H	H	H	H	L	$\overline{\text{Y}}$7

X : DONT' CARE

UPD74HC573GS 【NEC】
(Octal D–Type Latch With NON–Inverted 3–State Outputs)


$\overline{\text{OE}}$ 1
D0 2
D1 3
D2 4
D3 5
D4 6
D5 7
D6 8
D7 9
GND 10
20 V_{CC}
19 Q0
18 Q1
17 Q2
16 Q3
15 Q4
14 Q5
13 Q6
12 Q7
11 LE

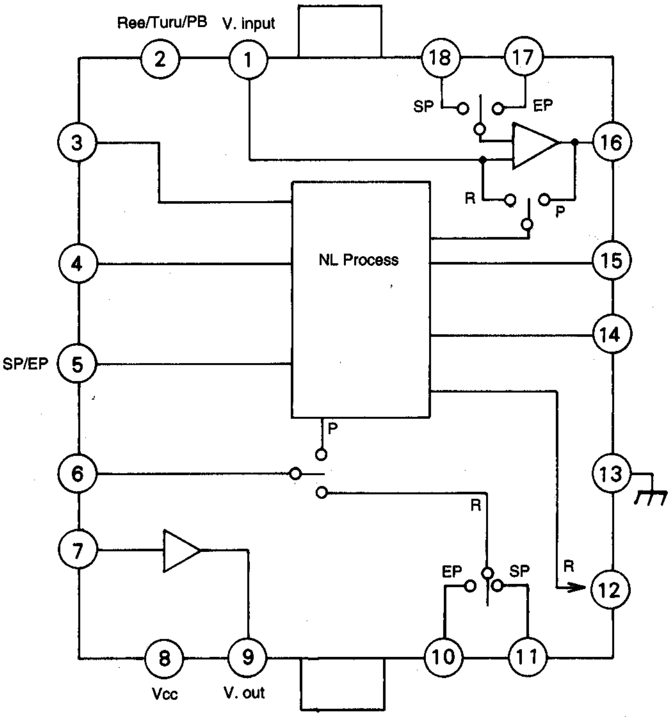
(TOP VIEW)

TRUE Table

INPUTS			OUTPUTS
$\overline{\text{OE}}$	LE	D	Q
H	X	X	HZ
L	L	X	Q_n
L	H	L	L
L	H	H	H

X : Don't care.
Z : Hi impedance
Q_n : Level of Q output before LE becomes "L".

VC2076MP-XE 【JVC】
(FM Signal Processer)


Ree/Turu/PB
V. input
2
1
18
17
SP
EP
3
16
R
P
NL Process
4
15
14
SP/EP
5
P
6
13
R
7
EP
SP
R
12
8
9
10
11
Vcc
V. out

XRA7765AS 【ROHM】
(Reference BA7765AS)